

07-03-2000



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OPR/FINANC

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RECORDATION FORM COVER SHEET
PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

- New
- Resubmission (Non-Recordation)
Document ID#
- Correction of PTO Error
Reel # Frame #
- Corrective Document
Reel # Frame #

Conveyance Type

- Assignment
- Security Agreement
- License
- Change of Name
- Merger
- Other

U.S. Government

(For Use ONLY by U.S. Government Agencies)

- Departmental File
- Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Name (line 1) Linkabit Wireless, Inc.

Execution Date
Month Day Year

2/23/2000

Name (line 2)

Second Party

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Receiving Party

Mark if additional names of receiving parties attached

Name (line 1) Credit Suisse First Boston

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1) Eleven Madison Avenue

Address (line 2)

Address (line 3) New York NY 10010

City

State/Country

Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

06/30/2000 DNEUTEN 00000241 192385 09196361

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Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

Correspondent Name and Address

Area Code and Telephone Number (212) 735-2203

Name Diane Kasselmann, Esq.

Address (line 1) Skadden, Arps, Slate, Meagher & Flom LLP

Address (line 2) Four Times Square

Address (line 3) New York, NY 10036-6522

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)

9/196,361

Patent Number(s)

5,197,125 5,067,140 4,697,261

5,544,200 4,879,720 5,151,904

5,282,227 5,959,999 5,615,338

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. # 14

Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$ 560

Method of Payment: Enclosed Deposit Account

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

Deposit Account Number: # 19-2385

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.

Diane Kasselmann
Name of Person Signing



Signature

May 8, 2000

Date

**RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY**

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Name (line 1)

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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)

Patent Number(s)

5,410,739

4,687,261

5,073,869

4,984,186

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Agreement"), dated as of February 23, 2000, is made between LINKABIT WIRELESS, INC., a Delaware corporation (the "Grantor"), and CREDIT SUISSE FIRST BOSTON ("CSFB"), in its capacity as Administrative Agent for each of the Secured Parties;

WITNESSETH:

WHEREAS, pursuant to a Senior Secured Credit Agreement, dated as of February 23, 2000 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among THE TITAN CORPORATION, a Delaware corporation (the "Borrower"), the various financial institutions as are or may become parties thereto (the "Lenders"), CSFB, as Administrative Agent, First Union Securities, Inc., as Syndication Agent, and The Bank of Nova Scotia, as Documentation Agent, the Lenders and the Issuers have extended Commitments to make Credit Extensions to the Borrower;

WHEREAS, in connection with the Credit Agreement, the Grantor has executed and delivered a Subsidiary Security Agreement, dated as of February 23, 2000 (as amended, restated, supplemented or otherwise modified from time to time, the "Security Agreement");

WHEREAS, as a condition precedent to the making of the Credit Extensions (including the initial Credit Extension) under the Credit Agreement, the Grantor is required to execute and deliver this Agreement;

WHEREAS, the Grantor has duly authorized the execution, delivery and performance of this Agreement; and

WHEREAS, it is in the best interests of the Grantor to execute this Agreement inasmuch as the Grantor will derive substantial direct and indirect benefits from the Credit Extensions made from time to time to the Borrower by the Lenders and the Issuers pursuant to the Credit Agreement;

NOW THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, and in order to induce the Lenders and the Issuers to make Credit Extensions (including the initial Credit Extension) to the Borrower

pursuant to the Credit Agreement, the Grantor agrees, for the benefit of each Secured Party, as follows.

SECTION 1. Definitions. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided (or incorporated by reference) in the Security Agreement.

SECTION 2. Grant of Security Interest. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, to secure all of the Secured Obligations, the Grantor does hereby mortgage, pledge and hypothecate to the Administrative Agent, and grant to the Administrative Agent a security interest in, for its benefit and the benefit of each Secured Party, all of the following property (the "Patent Collateral"), whether now owned or hereafter acquired or existing by it:

(a) all letters patent and applications for letters patent throughout the world, including all patent applications in preparation for filing anywhere in the world and including each patent and patent application referred to in Item A of Attachment 1 attached hereto;

(b) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the items described in clause (a);

(c) all patent licenses, including each patent license referred to in Item B of Attachment 1 attached hereto; and

(d) all proceeds of, and rights associated with, the foregoing (including license royalties and proceeds of infringement suits), the right to sue third parties for past, present or future infringements of any patent or patent application, including any patent or patent application referred to in Item A of Attachment 1 attached hereto, and for breach or enforcement of any patent license, including any patent license referred to in Item B of Attachment 1 attached hereto, and all rights corresponding thereto throughout the world.

SECTION 3. Security Agreement. This Agreement has been executed and delivered by the Grantor for the purpose of registering the security interest of the Administrative Agent in the Patent Collateral with the United States Patent and

Trademark Office and corresponding offices in other countries of the world. The security interest granted hereby has been granted as a supplement to, and not in limitation of, the security interest granted to the Administrative Agent for its benefit and the benefit of each Secured Party under the Security Agreement. The Security Agreement (and all rights and remedies of the Administrative Agent and each Secured Party thereunder) shall remain in full force and effect in accordance with its terms.

SECTION 4. Release of Security Interest. Upon the Termination Date, the Administrative Agent shall, at the Grantor's expense, execute and deliver to the Grantor all instruments and other documents as may be necessary or proper to release the lien on and security interest in the Patent Collateral which has been granted hereunder.


SECTION 5. Acknowledgment. The Grantor does hereby further acknowledge and affirm that the rights and remedies of the Administrative Agent with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein.

SECTION 6. Loan Document, etc. This Agreement is a Loan Document executed pursuant to the Credit Agreement and shall (unless otherwise expressly indicated herein) be construed, administered and applied in accordance with the terms and provisions of the Credit Agreement.

SECTION 7. Counterparts. This Agreement may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which shall constitute together but one and the same agreement.

IN WITNESS WHEREOF, the Grantor has caused this Subsidiary Patent Security Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

LINKABIT WIRELESS, INC., as
Grantor

By: 
Name: Ray Guillaume
Title: Assistant Treasurer

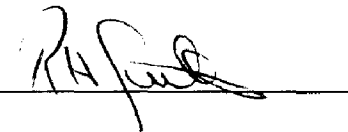
SUBSIDIARY PATENT SECURITY AGREEMENT

PATENT
REEL: 010881 FRAME: 0154

AFFIDAVIT


STATE OF CALIFORNIA)
) SS.
COUNTY OF LOS ANGELES)

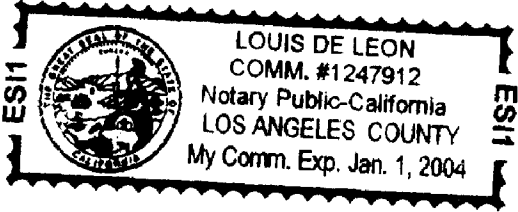
I, Ray Guillaume, being duly sworn, do depose and say that I am the Assistant Treasurer of LINKABIT WIRELESS, INC., that I am authorized to execute the foregoing Subsidiary Patent Security Agreement on behalf of said organization and that I did so by authority of the Board of Directors of said organization.


Ray Guillaume


SUBSCRIBED AND SWORN to before me on this ~~22nd~~ ^{23rd} day of L.D.

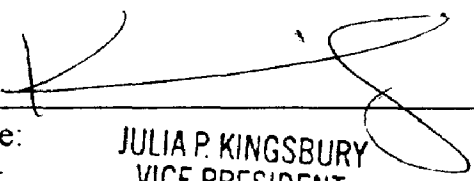
February, 2000.


Louis De Leon



CREDIT SUISSE FIRST BOSTON, as
Administrative Agent

By 
Thomas G. Muoio
Vice President

By 
Name: JULIA P. KINGSBURY
Title: VICE PRESIDENT

Schedule II
to Subsidiary Security Agreement
and

Attachment I to
Patent Security Agreement

PATENTS OWNED/USED BY LINKABIT WIRELESS, INC.

ASSIGNEE	TITLE	PATENT NO. ISSUE DATE	APP. SER. NO. APP. DATE	FOREIGN
Linkabit Wireless, Inc.	Access assignment in a DAMA communication system	5,197,125 03/23/93	07/629,668 12/18/90	PCT
Linkabit Wireless, Inc.	Acquisition of carrier phase and symbol timing through joint estimation of phase and timing adjustments	5,544,200 08/06/96	08/351,797 12/8/94	CN EPO IN MA TH
Linkabit Wireless, Inc.	Communication signal detection and acquisition	5,282,227 01/25/94	07/886,774 05/21/92	
Linkabit Wireless, Inc.	Conversion of analog signal into I and Q digital signals and enhanced image rejection	5,067,140 11/19/91	07/395,011 08/16/89	
Linkabit Wireless, Inc.	Decoder ring system	4,879,720 11/07/89	07/166,187 03/10/88	PCT EPO* Germany Italy France Japan Great Britain

ASSIGNEE	TITLE	PATENT NO. ISSUE DATE	APP. SER. NO. APP. DATE	FOREIGN
Linkabit Wireless, Inc.	Linear predictive echo canceller integrated with relp vocoder	4,697,261 09/29/87	06/904,551 09/05/86	CAN JAP
Linkabit Wireless, Inc.	Method and apparatus for determination of predistortion parameters for a quadrature modulator	Pending Application	09/196,361 11/19/98	
Linkabit Wireless, Inc.	Providing control-function data in communication-data channel of a full-mesh satellite communication network by dynamic time-slot assignment in TDMA waveform	5,959,999 9/28/99	08/716,966 09/20/96	EPO ID TH PH
Linkabit Wireless, Inc.	Reconfigurable, multi-user viterbi decoder	5,151,904 09/29/92	07/590,238 09/27/90	PCT
Linkabit Wireless, Inc.	System for simultaneously displaying video signal from second video channel and video signal generated at that site or video signal received from first channel (as amended)	5,615,338 03/25/97	08/449,727 05/24/95	EPO Thailand Indonesia *Australia
Linkabit Wireless, Inc.	Variable data message communication over voice communication channel	5,410,739 04/25/95	07/954,279 09/29/92	
Linkabit Wireless, Inc.	Tracks for track-laying vehicles	4,687,261 8/18/87	774,483 09/20/85	
Linkabit Wireless, Inc.	Suppression of spurious frequency components in direct digital frequency synthesizer	5,073,869 12/17/91	389,735 08/25/89	
Linkabit Wireless, Inc.	Phase accumulator with dithered incrementing of accumulation due to fine phase components	4,984,186 1/8/91	398,703 08/25/89	

PATENT
REEL: 010881 FRAME: 0158

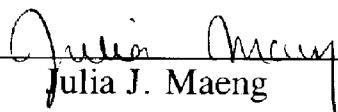
LINKABIT WIRELESS, INC.

PATENTS - 2

Certificate of Express Mail under 37 CFR 1.10


Attorney Ref. No.: 217730/1105
Title of Paper: Security Agreement (Patents)
Parties Involved: Linkabit Wireless, Inc.
Credit Suisse First Boston
"Express Mail" Label No.: EL577173227US
Date of Deposit: May 19, 2000

I hereby certify that the foregoing is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Box Assignments, Washington, DC 20231


Julia J. Maeng

STATE OF NEW YORK)
)
BOROUGH OF MANHATTAN) ss.

On this 22nd day of February, 2000, before me personally came Thomas Muoio and Julia Kingsbury, who being duly sworn, did depose and say that they are Vice President and Vice President, respectively, of Credit Suisse First Boston, that they are authorized to execute the foregoing Subsidiary Patent Security Agreement on behalf of said organization and that they did so by authority of the Board of Directors of said organization.



Notary Public

CATHERINE VAPSPA
NOTARY PUBLIC, State of New York
No. 4977654
Qualified in Nassau County
Commission Expires FEB 11, 2001