

PATENT ASSIGNMENT

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 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Intermec IP Corp.	12/24/2002
RECEIVING PARTY DATA	
Name:	Broadcom Corporation
Street Address:	16215 Alston Parkway
City:	Irvine
State/Country:	CALIFORNIA
Postal Code:	92619
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	12547348
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Correspondent Name:	Hao Tan/Ruben Rios
Address Line 1:	P.O. Box 10395
Address Line 4:	Chicago, ILLINOIS 60610
ATTORNEY DOCKET NUMBER:	14528.00229
NAME OF SUBMITTER:	Hao Tan
Total Attachments: 22 source=Assignment4#page1.tif source=Assignment4#page2.tif source=Assignment4#page3.tif	

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ASSIGNMENT

THIS ASSIGNMENT is made and effective as of the 24th day of December, 2002. by INTERMEC IP CORP. (hereinafter referred to as the "ASSIGNOR"), a company organized and existing under the laws of Delaware, having a principal place of business at 21900 Burbank Boulevard, Woodland Hills, CA 91367.

WITNESSETH

WHEREAS, said ASSIGNOR is the owner of the entire right, title and interest in and to the Patent Applications and Patents in the United States of America and other foreign countries, set forth in Attachment A hereto;

WHEREAS, BROADCOM CORPORATION, a company organized and existing under the laws of Delaware, having a principal place of business at 16215 Alston Parkway, Irvine, California 92619, (the "ASSIGNEE") is desirous of acquiring the entire right, title and interest in and to such Patents Applications and Patents, both from the United States and foreign.

Now therefore, in exchange for receipt of good and sufficient consideration, the receipt and sufficiency of which is hereby acknowledged, and as agreed to by the ASSIGNEE and ASSIGNOR, ASSIGNOR hereby assigns and transfers to ASSIGNEE and ASSIGNEE accepts, all of the rights, title and interest of ASSIGNOR throughout the World in and to any and all inventions claimed or disclosed in such Patents and Patent Applications which are set forth and listed in Attachment A hereto.

This Assignment includes all of ASSIGNOR's right, title and interest in, to and under each of the Patent Applications and Patents set forth and listed in Attachment A hereto (including, without limitation, rights to damages and payments for past, present or future infringements or misappropriations), and, as agreed between the parties, all continuations, continuations-in-part, divisionals, substitute, reexaminations, post-opposition foreign counterpart patents, and applications, reissues and extensions thereof, if any; and, ASSIGNOR requests the Commissioner of Patents of the United States (and all foreign officials, whose duty it is to issue patents on applications as aforesaid) to record ASSIGNEE as the owner of such Patent or Application, to the same extent as held by ASSIGNOR, and to issue the Letters Patent for said Patents to be in the name of the said ASSIGNEE, as an assignee of the Patents.

INTERMEC IP CORP., ASSIGNOR

By: Daniel S. Bishop

BROADCOM CORP., ASSIGNEE

By: [Signature]

County of Los Angeles)
) ss.
State of California)

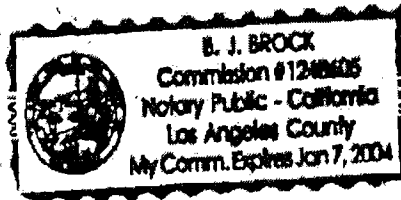
On December 23, 2002, before me, BJ Brock, Notary Public personally

appeared Daniel S. Bishop, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument, the entity upon behalf of which he/she acted, executed the instrument.

WITNESS my hand and official seal:

BJ Brock

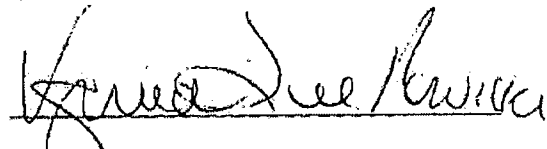
NOTARY PUBLIC

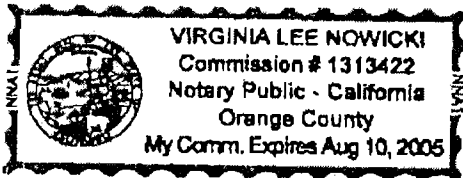


County of Orange)
) ss.
State of California)

On January 17, 2003, before me, Virginia Lee Nowicki, Notary Public, personally appeared William J Ruenle, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that ~~he~~she executed the same in ~~his~~her authorized capacity, and that by ~~his~~her signature on the instrument, the entity upon behalf of which ~~he~~she acted, executed the instrument.

WITNESS my hand and official seal:


NOTARY PUBLIC



ATTACHMENT A

36500	4910794		US	Mobile Radio Data Communication System & Method
36500ZXD		10/057816	US	Remote Radio Data Communication System with Data Rate Switching
36625X	4924462		US	Multiterminal Communication System and Method
37139	5052020		US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency-Modulated Transmissions
37139X/CA	2074169		CA	Method of and Apparatus For Controlling Modulation of Digital Signals in Frequency-Modulated Transmissions
36500X	5070536		US	Mobile Radio Data Communication System and Method
	1316218		CA	Mobile Radio Data Communication System and Method
	2223914		GB	Mobile Radio Data Communication System and Method
36767XY	5202817		US	Hand-Held Data Capture System With Interchangeable Modules
36767XZ	5218187		US	Hand-Held Data Capture System with Interchangeable Modules
	678135		AU	Hand-Held Data Capture System with Interchangeable Modules
	69231057.6		DE	Hand-Held Data Capture System with Interchangeable Modules
	573567		GB	Hand-Held Data Capture System with Interchangeable Modules
		2104788	CA	Hand-Held Data Capture System with Interchangeable Modules
	573567		FR	Hand-Held Data Capture System with Interchangeable Modules
37882X	5295154		US	Radio Frequency Local Area Network
36767YXX	5313053		US	Laser Scanner Module Having Integral Interfacing with Hand-Held Data Capture Terminal
36767XZX	5331136		US	Hand-Held Data Capture System with Interchangeable Modules
38127		08/513658	US	Modular, Portable Data Processing Terminal For use in a Communication Network
37139XX	5365546		US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency Modulated Transmissions
37882YC	5394436		US	Radio Frequency Local Area Network
36767XB		08/478488	US	Hand-Held Data Capture System with Interchangeable Modules
36767XYA	5418684		US	Hand-Held Data Capture System with Interchangeable Modules
37834ZX	5425051		US	Radio Frequency Communication Network Having Adaptive Parameters
37882XA	5428636		US	Radio Frequency Local Area Network
36500XXX	5483676		US	Mobile Radio Data Communication System and Method
INT094-04	5495500		US	Homodyne Radio Architecture for Direct Sequence Spread Spectrum Data Reception
37972C	5500872		US	Spread Spectrum Base Band Processor

37882YAX	5504746	US	Radio Frequency Local Area Network
DN	02012917.7	EP	Radio Frequency Local Area Network
37882YPCT	664864	AU	Radio Frequency Local Area Network
	701114	AU	Radio Frequency Local Area Network
36808XYC	5515303	US	Hand-held Computerized Data Collection Terminal with Rechargeable Battery Pack Sensor and Battery Power Conservation
36808XYE	08/921485	US	Hand-Held Computerized Data Collection Terminal
36767XYC	5530619	US	Hand-held Data Capture System with Interchangeable Modules and Side-Mounted Function Key
37940E	5539193	US	Modular Hand-Held Data Entry System
37940F	5539194	US	Modular Hand-Held Data Entry System
38050B	5546397	US	High Reliability Access Point for Wireless Local Area Network
38050BB	09/357429	US	Local Area Network Having Multiple Channel Wireless Access
37139XXA	5555276	US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency - Modulated Transmissions
INT093-49	5565670	US	Cordless RF Link for Bar Code Input Device Modulating Impulses Corresponding to Data State Transitions
36767XZXX	5567925	US	Hand-Held Data Capture System with Interchangeable Modules
37998XB	5574979	US	Periodic Interference Avoidance in a Wireless Radio Frequency Communication System
38017	5590346	US	Antenna Cap for Computer Device Utilizing a Radio Card
INT093-09C	5602380	US	Barcode Scanner-Reader Wireless Infrared Link
37967B	5602854	US	Wireless Personal Local Area Network Utilizing Removable Frequency Modules with Digital Interfaces and Idle Sense Communication Protocol
INT090-05C	5610595	US	Packet Radio Communication System Protocol
38157	5627412	US	Dynamically Switchable Power Supply
38157XA	09/735406	US	Battery Powered Device with Dynamic Power and Performance Management
37998XD	5657317	US	Hierarchical Communication System Using Premises, Peripheral and Vehicular Local Area Networking
37882AXX	5673031	US	Redundant Radio Frequency Network Having a Roaming Terminal Communication Protocol
37882AAYC	09/960265	US	Redundant Radio Frequency Network Having a Roaming Terminal Communication Protocol
37977B	5679943	US	Hand-Held Terminal with Display Screens, Interactive Screens, Magnetic Credit Card Readers, Scanners, Printers and Handlers
36767XZAB	5680633	US	Modular, Portable Data Processing Terminal for use in a Radio Frequency Communication Network

38163AY	08/973195	US	Spread Spectrum Transceiver Module Utilizing Multiple Mode Transmission
37967C	5682379	US	Wireless Personal Local Area Network
	696841	AU	Wireless Personal Local Area Network
	2152598	CA	Wireless Personal Local Area Network
	94905966.1	EP	Wireless Personal Local Area Network
37967X	08/499328	US	Transaction Control System Including Portable Data Terminal and Mobile Customer Service Station
37998G	5696903	US	Hierarchical Communications System using Microlink, Data Rate Switching, Frequency Hopping and Vehicular Local Area Networking
INT094-11	5703950	US	Method and Apparatus for Controlling Country Specific Frequency Allocation
37834YYB	5708680	US	Network Utilizing a Controller and Base Transceivers to Route Voice Packets
38000FB	5708833	US	Antenna Cap, Antenna Connectors and Telephone Line Connectors for Computer Devices Utilizing Radio and Modem Cards
38000FBA	09/006566	US	Antenna Cap, Antenna Connectors and Telephone Line Connectors for Computer Utilizing Radio and Modem Cards
37998XG	5726984	US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones
38099A	5734585	US	Method and Apparatus for Sequencing Power Delivery in Mixed Supply Computer Systems
37882YD	5740366	US	Communication Network Having a Plurality of Bridging Nodes which Transmit A Beam to Terminal Nodes in Power Saving State that it Has Messages Awaiting Delivery
36808YXCB	5747786	US	Communication Module for a Data Capture System
38009EA	5748619	US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing
	679593	AU	Communication Network Providing Wireless and Hard-Wired Dynamic Routing
38000G/EP	94916663.1	EP	Multiple Antenna Selection and Antenna Cap for Computer Devices Utilizing Radio and Modem Cards
38072	5748676	US	Network Utilizing Modified Preambles that Support Antenna Diversity
37998XE	5790536	US	Hierarchical Communication System Providing Intelligent Data, Program and Processing Migration
	700800	AU	Hierarchical Communication System Providing Intelligent Data, Program and Processing Migration
	715628	AU	Hierarchical Communication System Providing Intelligent Data, Program and Processing Migration
37998XE/EP	95927421.8	EP	Hierarchical Communication System Providing Intelligent Data Program

and Processing Migration			
37998XEB	09/723930	US	Hierarchical Communications System
37967XA	09/123875	US	Enhanced Mobility and Address Resolution in a Wireless Premises Based Network
36837E	5805807	US	Multilevel Data Communication System Including Local and Host Systems
37834YYA	5844893	US	System for Coupling Host Computer Means with Base Transceiver Units on a Local Area Network
37834YY1	09/972749	US	System for Coupling a Multiplicity of RF Data Collection Terminals with Host Computer Means
37834ZXA	5862171	US	Radio Frequency Communication Network Having Adaptive Communication Parameters
37834ZXC	09/799340	US	Radio Frequency Communication Network Having Adaptive Communication Parameters
38017A	5870279	US	Antenna Cap for Computer Device Utilizing a Radio Card
38066X	5880867	US	Infrared Backbone Communication Network Having a Radio Frequency Backup Channel
38066A	5880868	US	Infrared Backbone Communication Network Having a Radio Frequency Backup Channel
36500YZCXA	5896561	US	Communication Network Having a Dormant Polling Protocol
36767XYD	5898162	US	Hand-Held Data Capture System with Interchangeable Module
INT096-32	5912921	US	Concurrent Multiple Data Rate Communications in a Wireless Local Area Network
37139XXB	5912926	US	Method and Apparatus for Controlling Modulation of Digital Signals in Frequency Modulated Transmissions
37940G	5917175	US	Modular Hand-Held Data Entry System with Voice Interface
INT094-11C	5940509	US	Method and Apparatus for Controlling Country Specific Frequency Allocation
37834XXBX	5940771	US	Network Supporting Roaming, Sleeping Terminals
37834XXBY	09/318668	US	Network Supporting Roaming, Sleeping Terminals
INT096-30	5946344	US	Multiple-Rate Direct Sequence Architecture Utilizing a Fixed Chipping Rate and Variable Spreading Code Lengths
INT 096-30JP	10-542772	JP	Multiple-Rate Direct Sequence Architecture Utilizing a Fixed Chipping Rate and Variable Spreading Code Lengths
37998XDA	5949776	US	Hierarchical Communication System using Premises, Peripheral and Vehicular Local Area Networking
38050BAY	5960344	US	Local Area Network Having Multiple Channel Wireless Access
INT096-25	5982812	US	Method and Apparatus for Monitoring Frequency Synthesizer Locking Time
38190R	5990733	US	Delay Line Ramp Demodulator
38000EA	5991864	US	Power Connectors, Antenna Connectors and Telephone Line Connectors

for Computer Devices Utilizing Radio and Modem Cards			
INT097-06	6005530	US	Switched Gain Antenna for Enhanced System Performance
INT095-35	6005885	US	Methodology for Discontinuous Radio Reception Utilizing Embedded Frame Length Words
36649XZC	6006100	96116280.7	EP
		641541	AU
		494298	GB
		494298	DE
		494298	ES
		494298	FR
		494298	IT
36649XZD	09/467255	US	Multi-Level, Hierarchical Radio-Frequency Communication System
INT096-29	6009119	US	Adaptive Power Leveling of an RF Transceiver Utilizing Information Stored in Non-Volatile Memory
36767XZAC	6014705	US	Modular Portable Data Processing Terminal Having A Higher Layer and Lower Layer Partitioned Communication Protocol Stack for use in a Radio Frequency Communication Network
36767XZAE	09/597917	US	Modular Portable Data Processing Terminal for use in a Radio Frequency Communication Network
38072A	6018555	US	Network Utilizing Modified Preambles that Support Antenna Diversity
36808YXCD	6023147	US	Hand-Held Computerized Data Collection Terminal with Rechargeable Battery Pack Sensor and Battery Power Conservation
37882YAYA	6046992	US	A Radio Frequency Local Area Network
37882YAYB	09/542424	US	A Radio Frequency Local Area Network
INT096-31	6075807	US	Windowed Digital Matched Filter Circuit for Power Reduction in Battery-Powered CDMA Radios
37882XBA	6084867	US	Apparatus and Method of Routing Data in a Radio Frequency Local Area Network
36837EA	6192400	US	Multilevel Data Communication System Including Local and Host Systems
36767XYE	6244512	US	Hand-Held Data Capture System with Interchangeable Modules
38234RX	6281850	US	Broadband Multiple Element Antenna System
INT097-02	6320896	US	RF Receiver Having Frequency-Hopping/Direct-Sequence Spread Spectrum Signal Discrimination
INT097-03	6327312	US	RF Narrowband/Wideband Discriminating System for Spread Spectrum Signal Differentiation
37967CA	6359872	US	Wireless Personal Local Area Network

37967CAA		10/101436	US	Wireless Personal Local Area Network
37882YE	6374311		US	Radio Frequency Local Area Network
37882YEA		10/123873	US	Radio Frequency Local Area Network
37998XGA	6389010		US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones
37998XGB		10/141506	US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones
37882XBB	6400702		US	A Radio Frequency Local Area Network
37882XBC		10/162229	US	Radio Frequency Local Area Network
38009EBA	6407991		US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing
38009EBB		10/144250	US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing

Exhibit A

Docket No.	App. No.	Country	Title	Date	Inventors
36500ZXD	10/057816	US	Remote Radio Data Communication System with Data Rate Switching	01/24/2002	Ronald Mahany
38127	08/513658	US	Modular, Portable Data Processing Terminal For use in a Communication Network	08/11/1995	Phillip Miller Robert Meier Ronald Mahany Patrick Kinney Steven Koenck
38050BB	09/357429	US	Local Area Network Having Multiple Channel Wireless Access	07/20/1999	Ronald Mahany
38157XA	09/735406	US	Battery Powered Device with Dynamic Power and Performance Management	12/12/2000	Paul Beard
37882AAYC	09/960265	US	Redundant Radio Frequency Network Having a Roaming Terminal Communication Protocol	09/21/2001	Robert Meier
38163AY	08/973195	US	Spread Spectrum Transceiver Module Utilizing Multiple Mode Transmission	03/06/2000	Ronald Mahany
37967X	08/499328	US	Transaction Control System Including Portable Data Terminal and Mobile Customer Service Station	07/07/1995	George Hanson Roger Wolf Robert Meier Ronald Mahany Phillip Miller Steven Koenck
38000FBA	09/006566	US	Antenna Cap, Antenna Connectors and Telephone Line Connectors for Computer Utilizing Radio and Modem Cards	01/13/1998	Guy West Ronald Mahany Patrick Kinney
37998XEB	09/723930	US	Hierarchical Communications System	11/28/2000	Ronald Mahany
37967XA	09/123875	US	Enhanced Mobility and Address Resolution in a Wireless Premises Based Network	07/28/1998	Steven Salvay Ronald Mahany Steven Koenck Charles Gollnick George Hanson Roger Wolf Guy West Ronald Lusc Keith Cargin, Jr. Arvin Danielson Phillip Miller Robert Meier

Docket	Patent No.	Country	Title	Date	Inventors	Attorneys
37834YY1	09/972749	US	System for Coupling a Multiplicity of RF Data Collection Terminals with Host Computer Means	10/08/2001	Ronald Luse Amos Young Guy West Marvin Sojka Charles Gollnick Robert Geers Mary Detweiler Arvin Danielson James Chossen Keith Cargin, Jr. Richard Arensdorf John Pavek Gary Spiess	Mahany
37834ZXC	09/799340	US	Radio Frequency Communication Network Having Adaptive Communication Parameters	03/05/2001	Ronald	Mahany
36649XZD	09/467255	US	Multi-Level, Hierarchical Radio-Frequency Communication System	12/20/1999	Keith Phillip Ronald Steven Steven George Guy Arvin	Cargin, Jr. Miller Mahany Salvay Koenck Hanson West Danielson
36767XZAE	09/597917	US	Modular Portable Data Processing Terminal for use in a Radio Frequency Communication Network	06/19/2000	Steven Guy Ronald Phillip Patrick	Koenck West Mahany Miller Kinney
37882YAYB	09/542424	US	A Radio Frequency Local Area Network	04/04/2000	Robert	Meier
37967CAA	10/101436	US	Wireless Personal Local Area Network	03/19/2002	Charles Ronald Guy Ronald	Gollnick Mahany West Luse
37882YEA	10/123873	US	Radio Frequency Local Area Network	04/16/2002	Ronald Robert Ronald	Luse Meier Mahany
37998XGB	10/141506	US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones	05/08/2002	Michael Joseph	Morris Kubler

Doc. No.	Application No.	Country	Title	Date	Inventor	Attorney
37882XBC	10/162229	US	Radio Frequency Local Area Network	06/04/2002	Robert Meier	
38009EBB	10/144250	US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing	05/13/2002	Robert Meier	
37834XXBY	09/318668	US	Network Supporting Roaming, Sleeping Terminals	05/25/1999	Ronald Mahany Ronald Luse Amos Young Guy West Marvin Sojka Charles Gollnick Robert Geers Mary Detweiler Arvin Danielson James Chossen Keith Cargin, Jr. Richard Arensdorf John Pavck Gary Spiess Robert Meier	
36808XYE	08/921485	US	Hand-Held Computerized Data Collection Terminal		Alfred Koelle Jeremy Landt	
36767XB	08/478,488	US	Hand-Held Data Capture System with Interchangeable Modules	06/07/95	Steven Koenck Phillip Miller Arvin Danielson Ronald Mahany Dennis Durbin Keith Cargin George Hanson Darald Schultz Robert Geers Darrel Boatwright William Gibbs Stephen Kelly	(a)

Patent No.	Pub. No.	Country	Title	Date	Inventors
36500	4910794	US	Mobile Radio Data Communication System & Method	03/20/1990	Ronald Mahany
37139	5052020	US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency-Modulated Transmissions	09/24/1991	Steven Koenck Ronald Mahany
36500X	5070536	US	Mobile Radio Data Communication System and Method	12/03/1991	Guy West Marvin Sojka Ronald Mahany
36767XY	5202817	US	Hand-Held Data Capture System With Interchangeable Modules	04/13/1993	Arvin Danielson Robert Geers William Gibbs Dennis Durbin Steven Koenck Ronald Mahany Phillip Miller George Hanson Keith Cargin, Jr. Darald Schultz Darrell Boatwright
36767XZ	5218187	US	Hand-Held Data Capture System with Interchangeable Modules	06/08/1993	Jeffrey Krunnfusz Darald Schultz George Hanson Steven Koenck Phillip Miller
37882X	5295154	US	Radio Frequency Local Area Network	03/15/1994	Robert Meier
36767YXX	5313053	US	Laser Scanner Module Having Integral Interfacing with Hand-Held Data Capture Terminal	05/17/1994	George Hanson Phillip Miller Darald Schultz Jeffrey Krunnfusz Steven Koenck
36767XZX	5331136	US	Hand-Held Data Capture System with Interchangeable Modules	07/19/1994	George Hanson Phillip Miller Darald Schultz Jeffrey Krunnfusz Steven Koenck

Patent No.	Pub. No.	Country	Title	Issue Date	Inventor(s)
37139XX	5365546	US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency Modulated Transmissions	11/15/1994	William Ronald Steven Mahany Koencck
37882YC	5394436	US	Radio Frequency Local Area Network	02/28/1995	Robert Ronald Ronald Meier Mahany Luse
36625X	4,924,462	US	Multiterminal Communication System and Method	01/03/1989	Marvin Sojka
36767XYA	5418684	US	Hand-Held Data Capture System with Interchangeable Modules	05/23/1995	George Steven Ronald Keith Arvin Darald Dennis Robert William Darrell Phillip Hanson Koencck Mahany Cargin, Jr. Danielson Schultz Durbin Geers Gibbs Boatwright Miller
37834ZX	5425051	US	Radio Frequency Communication Network Having Adaptive Parameters	06/13/1995	Ronald Mahany
37882XA	5428636	US	Radio Frequency Local Area Network	06/27/1995	Robert Meier
36500XXX	5483676	US	Mobile Radio Data Communication System and Method	01/09/1996	Marvin Guy Ronald Sojka West Mahany
INT094-04	5495500	US	Homodyne Radio Architecture for Direct Sequence Spread Spectrum Data Reception	02/27/1996	Alan Jovanovich
37972C	5500872	US	Spread Spectrum Base Band Processor	03/19/1996	Ronald Patrick Steven Mahany Kinney Koencck
37882YAX	5504746	US	Radio Frequency Local Area Network	04/02/1996	Robert Meier
36808XYC	5515303	US	Hand-held Computerized Data Collection Terminal with Rechargeable Battery Pack Sensor and Battery Power Conservation	05/07/1996	Darrell William Keith Ronald Dennis Darald Boatwright Gibbs Cargin, Jr. Mahany Durbin Schultz

Patent No.	Pub. No.	Country	Title	Date	Inventors
36767XYC	5530619	US	Hand-held Data Capture System with Interchangeable Modules and Side-Mounted Function Key	06/25/1996	Ronald Mahany Dennis Durbin William Gibbs George Hanson Arvin Danielson Keith Cargin, Jr. Darald Schultz Robert Geers Steven Koenck Darrell Boatwright Phillip Miller
37940E	5539193	US	Modular Hand-Held Data Entry System	07/23/1996	Darrell Boatwright Keith Cargin, Jr. Arvin Danielson Richard Arensdorf Glen Adams Steven Koenck Dennis Durbin George Hanson Ronald Mahany Robert Geers Darald Schultz William Gibbs Phillip Miller James Hutton
37940F	5539194	US	Modular Hand-Held Data Entry System	07/23/1996	Darald Schultz George Hanson Phillip Miller Steven Koenck Glen Adams Dennis Durbin Ronald Mahany William Gibbs Robert Geers Richard Arensdorf Arvin Danielson Keith Cargin, Jr. James Hutton Darrell Boatwright
38050B	5546397	US	High Reliability Access Point for Wireless Local Area Network	08/13/1996	Ronald Mahany
37139XXA	5555276	US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency - Modulated Transmissions	09/10/1996	Ronald Mahany William Frede Steven Koenck

Patent No.	Pub. No.	Country	Title	Date	Inventor(s)	Assignor(s)
INT093-49	5565670	US	Cordless RF Link for Bar Code Input Device Modulating Impulses Corresponding to Data State Transitions	10/15/1996	John	Flaherty
36767XZXX	5567925	US	Hand-Held Data Capture System with Interchangeable Modules	10/22/1996	Darald George Jeffrey Phillip Steven	Schultz Hanson Krunnfusz Miller Koenck
37998XB	5574979	US	Periodic Interference Avoidance in a Wireless Radio Frequency Communication System	11/12/1996	Guy	West
38017	5590346	US	Antenna Cap for Computer Device Utilizing a Radio Card	12/31/1996	Guy Ronald	West Mahany
INT093-09C	5602380	US	Barcode Scanner-Reader Wireless Infrared Link	02/11/1997	Jon	Bishay
37967B	5602854	US	Wireless Personal Local Area Network Utilizing Removable Frequency Modules with Digital Interfaces and Idle Sense Communication Protocol	02/11/1997	Charles Ronald Guy Ronald	Gollnick Luse West Mahany
INT090-05C	5610595	US	Packet Radio Communication System Protocol	03/11/1997	Gary Joseph Jay	Garrabrant Savarese Cho
38157	5627412	US	Dynamically Switchable Power Supply	05/06/1997	Paul	Beard
37998XD	5657317	US	Hierarchical Communication System using Premises, Peripheral and Vehicular Local Area Networking	08/12/1997	Ronald Guy	Mahany West
37882AXX	5673031	US	Redundant Radio Frequency Network Having a Roaming Terminal Communication Protocol	09/30/1997	Robert	Meier
37977B	5679943	US	Hand-Held Terminal with Display Screens, Interactive Screens, Magnetic Credit Card Readers, Scanners, Printers and Handlers	10/21/1997	John Darald Steven Mark	Rohde Schultz Koenck Rasmussen
36767XZAB	5680633	US	Modular, Portable Data Processing Terminal for use in a Radio Frequency Communication Network	10/21/1997	Patrick Guy Steven Ronald Phillip	Kinney West Koenck Mahany Miller

37967C	5682379	US	Wireless Personal Local Area Network	10/28/1997	Charles Guy Ronald Ronald	Gollnick West Luse Mahany
37998G	5696903	US	Hierarchical Communications System using Microlink, Data Rate Switching, Frequency Hopping and Vehicular Local Area Networking	12/09/1997	Ronald	Mahany
INT094-11	5703950	US	Method and Apparatus for Controlling Country Specific Frequency Allocation	12/30/1997	Duane Steven Alan	Charron Duke Jovanovich
37834YYB	5708680	US	Network Utilizing a Controller and Base Transceivers to Route Voice Packets	01/13/1998	Charles Ronald Marvin Richard Ronald Mary Keith James John Amos Guy Gary Arvin	Gollnick Mahany Sojka Arensndorf Luse Detweiler Cargin, Jr. Chossen Pavek Young West Spiess Danielson
38000FB	5708833	US	Antenna Cap, Antenna Connectors and Telephone Line Connectors for Computer Devices Utilizing Radio and Modem Cards	01/13/1998	Guy Ronald Patrick	West Mahany Kinney
37998XG	5726984	US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones	03/10/1998	Joseph Michael	Kubler Morris
38099A	5734585	US	Method and Apparatus for Sequencing Power Delivery in Mixed Supply Computer Systems	03/31/1998	Paul	Beard
37882YD	5740366	US	Communication Network Having a Plurality of Bridging Nodes which Transmit A Beam to Terminal Nodes in Power Saving State that it Has Messages Awaiting Delivery	04/14/1998	Ronald Ronald Robert	Mahany Luse Meier

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36808YXCB	5747786	US	Communication Module for a Data Capture System	05/05/1998	Dennis Durbin Darrell Boatwright Ronald Mahany Darald Schultz Keith Cargin, Jr.
38009EA	5748619	US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing	05/05/1998	Robert Meier
38072	5748676	US	Network Utilizing Modified Preambles that Support Antenna Diversity	05/05/1998	Ronald Mahany
37998XE	5790536	US	Hierarchical Communication System Providing Intelligent Data, Program and Processing Migration	08/04/1998	Guy West Ronald Mahany Michael Morris Robert Meier Arvin Danielson
36837E	5805807	US	Multilevel Data Communication System Including Local and Host Systems	09/08/1998	Ronald Mahany Arvin Danielson Phillip Miller Guy West Keith Cargin, Jr. George Hanson Steven Koencck Steven Salvay
37834YYA	5844893	US	System for Coupling Host Computer Meanswith Base Transceiver Units on a Local Area Network	12/01/1998	Keith Cargin, Jr. Marvin Sojka Mary Detweiler Robert Geers Guy West Gary Spiess John Pavek Ronald Mahany Arvin Danielson Richard Arensdorf Amos Young Charles Gollnick James Chossen Ronald Luse
37834ZXA	5862171	US	Radio Frequency Communication Network Having Adaptive Communication Parameters	01/19/1999	Ronald Mahany

Patent No.	Patent No.	Country	Title	Issue Date	Inventor(s)	Inventor(s)
38017A	5870279	US	Antenna Cap for Computer Device Utilizing a Radio Card	02/09/1999	Guy Ronald	West Mahany
38066X	5880867	US	Infrared Backbone Communication Network Having a Radio Frequency Backup Channel	03/09/1999	Ronald	Mahany
38066A	5880868	US	Infrared Backbone Communication Network Having a Radio Frequency Backup Channel	03/09/1999	Ronald	Mahany
36500YZCXA	5896561	US	Communication Network Having a Dormant Polling Protocol	04/20/1999	Steve Ronald	Schrader Mahany
36767XYD	5898162	US	Hand-Held Data Capture System with Interchangeable Module	04/27/1999	Dennis Darrell William Robert George Phillip Steven Ronald Keith Arvin Darald	Durbin Boatwright Gibbs Geers Hanson Miller Koenck Mahany Cargin, Jr. Danielson Schultz
INT096-32	5912921	US	Concurrent Multiple Data Rate Communications in a Wireless Local Area Network	06/15/1999	John Alan	Mensonides Jovanovich
37139XXB	5912926	US	Method and Apparatus for Controlling Modulation of Digital Signals in Frequency Modulated Transmissions	06/15/1999	Ronald Steven William	Mahany Koenck Frede
37940G	5917175	US	Modular Hand-Held Data Entry System with Voice Interface	06/29/1999	Ronald Steven George William Arvin Darrell Dennis Phillip Darald Keith Robert	Mahany Koenck Hanson Gibbs Danielson Boatwright Durbin Miller Schultz Cargin, Jr. Geers
INT094-11C	5940509	US	Method and Apparatus for Controlling Country Specific Frequency Allocation	08/17/1999	Steven Duane Alan	Duke Charron Jovanovich

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37834XXBX	5940771	US	Network Supporting Roaming, Sleeping Terminals	08/17/1999	Mary Detweiler Guy West Ronald Luse Keith Cargin, Jr. Richard Arensdorf Ronald Mahany Robert Meier Robert Geers Charles Gollnick James Chossen Arvin Danielson Gary Spiess Marvin Sojka John Pavcek Amos Young
INT096-30	5946344	US	Multiple-Rate Direct Sequence Architecture Utilizing a Fixed Chipping Rate and Variable Spreading Code Lengths	08/31/1999	Alan Jovanovich John Mensonides Duane Charron
37998XDA	5949776	US	Hierarchical Communication System using Premises, Peripheral and Vehicular Local Area Networking	09/07/1999	Ronald Mahany Guy West
38050BAY	5960344	US	Local Area Network Having Multiple Channel Wireless Access	09/28/1999	Ronald Mahany
INT096-25	5982812	US	Method and Apparatus for Monitoring Frequency Synthesizer Locking Time	11/09/1999	John Mensonides Alan Jovanovich
38190R	5990733	US	Delay Line Ramp Demodulator	11/23/1999	Ronald Mahany Tom Schuster
38000EA	5991864	US	Power Connectors, Antenna Connectors and Telephone Line Connectors for Computer Devices Utilizing Radio and Modem Cards	11/23/1999	John Mallard Ronald Mahany Patrick Kinney
INT097-06	6005530	US	Switched Gain Antenna for Enhanced System Performance	12/21/1999	John Mensonides Alan Jovanovich
INT095-35	6005885	US	Methodology for Discontinuous Radio Reception Utilizing Embedded Frame Length Words	12/21/1999	Alan Jovanovich John Mensonides

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36649XZC	6006100	US	Multi-Level, Hierarchical Radio-Frequency Communication System	12/21/1999	Steven George Keith Arvin Steven Phillip Ronald Guy	Salvay Hanson Cargin, Jr. Danielson Koenck Miller Mahany West
INT096-29	6009119	US	Adaptive Power Leveling of an RF Transceiver Utilizing Information Stored in Non-Volatile Memory	12/28/1999	John Alan	Mensonides Jovanovich
36767XZAC	6014705	US	Modular Portable Data Processing Terminal Having A Higher Layer and Lower Layer Partitioned Communication Protocol Stack for use in a Radio Frequency Communication Network	01/11/2000	Guy Patrick Steven Ronald Phillip	West Kinney Koenck Mahany Miller
38072A	6018555	US	Network Utilizing Modified Preambles that Support Antenna Diversity	01/25/2000	Ronald	Mahany
36808YXCD	6023147	US	Hand-Held Computerized Data Collection Terminal with Rechargeable Battery Pack Sensor and Battery Power Conservation	02/08/2000	Darrell Darald Keith Dennis Ronald William	Boatwright Schultz Cargin, Jr. Durbin Mahany Gibbs
37882YAYA	6046992	US	A Radio Frequency Local Area Network	04/04/2000	Robert Ronald	Meier Luse
INT096-31	6075807	US	Windowed Digital Matched Filter Circuit for Power Reduction in Battery-Powered CDMA Radios	06/13/2000	John Alan	Mensonides Jovanovich
37882XBA	6084867	US	Apparatus and Method of Routing Data in a Radio Frequency Local Area Network	07/04/2000	Robert	Meier

PATENT NUMBER	APPLICATION NUMBER	COUNTRY	TITLE	GRANT DATE	INVENTORS	ASSIGNORS
36837EA	6192400	US	Multilevel Data Communication System Including Local and Host Systems	02/20/2001	Guy Steven Ronald Arvin Phillip George Steven Keith	West Salvay Mahany Danielson Miller Hanson Koenck Cargin, Jr.
36767XYE	6244512	US	Hand-Held Data Capture System with Interchangeable Modules	06/12/2001	Arvin Ronald Darald Phillip Steven Darrell George Keith Robert William Dennis	Danielson Mahany Schultz Miller Koenck Boatwright Hanson Cargin, Jr. Geers Gibbs Durbin
38234RX	6281850	US	Broadband Multiple Element Antenna System	08/28/2001	Daniel	Klostermann
INT097-02	6320896	US	RF Receiver Having Frequency-Hopping/Direct-Sequence Spread Spectrum Signal Discrimination	11/20/2001	Alan John	Jovanovich Mensonides
INT097-03	6327312	US	RF Narrowband/Wideband Discriminating System for Spread Spectrum Signal Differentiation	12/04/2001	Alan John	Jovanovich Mensonides
37967CA	6359872	US	Wireless Personal Local Area Network	03/19/2002	Ronald Guy Charles Ronald	Mahany West Gollnick Luse
37882YE	6374311	US	Radio Frequency Local Area Network	04/16/2002	Ronald Ronald Robert	Mahany Luse Meier
37998XGA	6389010	US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones	05/14/2002	Joseph Michael	Kubler Morris
37882XBB	6400702	US	A Radio Frequency Local Area Network	06/04/2002	Robert	Meier
38009EBA	6407991	US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing	06/18/2002	Robert	Meier