

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3504086

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZEBRA ENTERPRISE SOLUTIONS CORP.	08/28/2015

RECEIVING PARTY DATA

Name:	ZIH CORP.
Street Address:	3 OVERLOOK POINT
City:	LINCOLNSHIRE
State/Country:	ILLINOIS
Postal Code:	60069

PROPERTY NUMBERS Total: 76

Property Type	Number
Patent Number:	5748891
Patent Number:	5920287
Patent Number:	5995046
Patent Number:	6002708
Patent Number:	6121926
Patent Number:	6127976
Patent Number:	6170748
Patent Number:	6268723
Patent Number:	6317082
Patent Number:	6349116
Patent Number:	6366242
Patent Number:	6366626
Patent Number:	6380894
Patent Number:	6385268
Patent Number:	6393045
Patent Number:	6400754
Patent Number:	6434194
Patent Number:	6476719
Patent Number:	6502005
Patent Number:	6577275

PATENT

Property Type	Number
Patent Number:	6593885
Patent Number:	6650302
Patent Number:	6655582
Patent Number:	6657586
Patent Number:	6721369
Patent Number:	6778888
Patent Number:	6795491
Patent Number:	6812839
Patent Number:	6853687
Patent Number:	6859485
Patent Number:	6892054
Patent Number:	6987744
Patent Number:	7046657
Patent Number:	7190271
Patent Number:	7212563
Patent Number:	7218229
Patent Number:	7475814
Patent Number:	7504952
Patent Number:	7714698
Patent Number:	7755541
Patent Number:	7756230
Patent Number:	7899006
Patent Number:	7916023
Patent Number:	7916026
Patent Number:	8169319
Patent Number:	8193913
Patent Number:	8265191
Patent Number:	8422398
Patent Number:	8427242
Patent Number:	8705671
Patent Number:	8768343
Patent Number:	8786495
Patent Number:	8892065
Patent Number:	8890677
Patent Number:	8896421
Patent Number:	9036505
Patent Number:	9060000
Application Number:	11668569

Property Type	Number
Application Number:	11696744
Application Number:	11942916
Application Number:	12103386
Application Number:	12169742
Application Number:	12523734
Application Number:	13039000
Application Number:	13184191
Application Number:	13411220
Application Number:	13464326
Application Number:	13570028
Application Number:	14323534
Application Number:	14518629
Application Number:	14529970
Application Number:	14529991
Application Number:	14683363
Application Number:	61239492
Application Number:	61364703
Application Number:	61369981

CORRESPONDENCE DATA

Fax Number: (847)955-4514

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 1 847 634 6700

Email: IP_Legal@zebra.com

Correspondent Name: ZEBRA TECHNOLOGIES CORPORATION

Address Line 1: 3 OVERLOOK POINT

Address Line 4: LINCOLNSHIRE, ILLINOIS 60069

ATTORNEY DOCKET NUMBER: ZES CORP

NAME OF SUBMITTER: CATHERINE DITRAPANI

SIGNATURE: /Catherine DiTrapani/

DATE SIGNED: 08/28/2015

Total Attachments: 10

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ASSIGNMENT

THIS ASSIGNMENT, made by **ZEBRA ENTERPRISE SOLUTIONS CORP**, a corporation of the state of California having its principal place of business at 2940 N. 1st Street, San Jose, California 95134, hereinafter referred to as Assignor;

WITNESSETH: That,

WHEREAS, as shown by the records of the United States Patent and Trademark Office, Assignor has previously acquired all right, title, and interest in and to the United States patent and/or patent applications identified on the attached "Schedule A" and in and to all corresponding patents and/or patent applications worldwide, and in and to the inventions represented thereby (all hereinafter referred to as the "Patents"); and,

WHEREAS **ZIH CORP.**, a corporation of the state of Delaware having its principal place of business at 3 Overlook Point, Lincolnshire, Illinois 60069, hereinafter referred to as Assignee, is desirous of acquiring the entire right, title, and interest in and to said Patents and in and to the inventions represented thereby; and

WHEREAS, the parties have agreed to the Assignment hereinafter set forth;

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, the above Assignor has sold and by these presents does hereby sell, assign, transfer, and convey unto the said Assignee, its successors and assigns, its entire right, title, and interest in and to said Patents and the inventions represented thereby, and any and all continuations, continuations-in-part, or divisions thereof, and any and all Letters Patent or reissues, reexaminations, or extensions thereof which may be granted therefor or thereon, to the full end of the term for which said Letters Patent may be granted, together with the right to claim priority in all foreign countries in accordance with the International Convention; all rights corresponding to said Patents in foreign countries throughout the world; and all of its rights to sue for past infringement of said Patents worldwide, together with all claims for damage by reason of past infringement of said Patents, with the right to sue for, and collect the same for Assignee's own use and enjoyment; all to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment and sale had not been made.

From time to time after the date hereof, at the request of either party hereto, and at the expense of the party so requesting, each of the parties hereto shall execute and deliver to such requesting party such documents and take such other action as such requesting party may

reasonably request in order to consummate more effectively the transactions contemplated hereby.

The Assignor further covenants and agrees that, at the time of the execution and delivery of these presents, it possesses full title to the inventions and Patents thereon as earlier identified, and that it has the unencumbered right and authority to make this assignment.

IN WITNESS WHEREOF, the Assignor has caused this assignment to be executed this 28th day of August, 2015.

ZEBRA ENTERPRISE SOLUTIONS CORP.

By: T-R (SEAL)
Printed/Typed Name: Todd R. Naughton
Its: Vice President, Treasurer and Director

STATE OF Illinois)
COUNTY OF Cook)

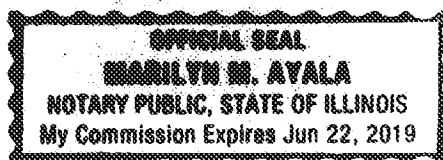
I, Marilyn M. Ayala, a Notary Public for said County and State, do hereby certify that Todd Naughton, personally came before me this day and acknowledged that he is VP President, Treasurer of **ZEBRA ENTERPRISE SOLUTIONS CORP.** and acknowledged, on behalf of **ZEBRA ENTERPRISE SOLUTIONS CORP.**, the due execution of the foregoing instrument.

Witness my hand and official seal, this the 28 day of August, 2015.

(Official Seal)

Marilyn M. Ayala
Notary Public

My commission expires: June 22, 2019



SCHEDULE A

ZEBRA MATTER CODE	COUNTRY	TITLE	SERIAL NO.	FILED	PATENT NO.	ISSUED
RTLSP100002ANPR01EP	EP	Radio Location System Including Transceiver Tags	99904335.9	1/28/1999		
RTLSP100002ANPR01US	US	Radio Location System For Precisely Tracking Objects By Rf Transceiver Tags Which Randomly And Repetively Emit Wideband Identification Signals	08/786,232	1/21/1997	5,920,287	7/6/1999
RTLSP100002BCIP01US	US	Radio Geo-Location System With Advanced First Received Wavefront Arrival Determination	09/239,399	1/28/1999	5,995,046	11/30/1999
RTLSP100002BCON01US	US	Radio Geo-Location System With Advanced First Received Wavefront Arrival Determination	09/442,710	11/19/1999	6,121,926	9/19/2000
RTLSP100002CCIP01US	US	Computer Workstation Tool For Displaying Performance Estimate Of Tagged Object Geo-Location System For Proposed Geometry Layout Of Tag Transmission Readers	09/626,021	7/27/2000	6,366,242	4/2/2002
RTLSP100002DCIP01US	US	Multi-Lateration System With Automatic Calibration And Error Removal	09/649,646	8/29/2000	6,380,894	4/30/2002
RTLSP100002ECIP01US	US	Low Cost DTOA Location Processing System Based On Multiple Readers-To-Single Processor Architecture	09/839,573	4/20/2001	6,593,885	7/15/2003
RTLSP100003ANPR01US	US	Transactions And Business Processes Executed Through Wireless Geolocation System Infrastructure	09/801,215	3/7/2001	6,577,275	6/10/2003
RTLSP100004ANPR01US	US	Data Communication System Harnessing Frequency Shift Keyed Magnetic Field	09/689,340	10/12/2000	6,349,116	2/19/2002
RTLSP100004BCIP01US	US	Proximity-Based Magnetic Field Generator For Controlling Operation Of Rf Burst-Transmitting Tags Of Geolocation System	09/759,290	1/11/2001	6,853,687	2/8/2005

ZEBRA MATTER CODE	COUNTRY	TITLE	SERIAL NO.	FILED	PATENT NO.	ISSUED
RTLSP00004CCIP01US	US	Ultra-Sensitive Magnetic Field Receiver Capable Of Operating In High Noise Environments	09/800,079	3/6/2001	6,476,719	11/5/2002
RTLSP00004DCIP01US	US	Use Of Rotating Magnetic Field To Enhance Communication With RF Burst-Transmitting Tags Of Object Location System	09/818,276	3/27/2001	6,812,839	11/2/2004
RTLSP00005ANPR01US	US	Wireless Call Tag Based Material Replenishment System	09/503,675	2/14/2000	6,317,082	11/13/2001
RTLSP00005NPR02US	US	Elapsed Time Clock For Part Call Tag-Based Replenishment System	09/503,167	2/14/2000	6,502,005	12/31/2002
RTLSP00006ANPR01US	US	Composite BPSK/AM-BPSK Based Spectral Suppression Of Out-Of-Band Energy From Saturated RF Amplifier	09/436,551	11/9/1999	6,721,369	4/13/2004
RTLSP00007ANPR01US	US	Magnetic Field Emission And Differential Receiver Coil Configuration For Discriminating Response Magnetic Field From Transponder Tag	09/159,555	9/24/1998	6,268,723	7/31/2001
RTLSP00007ANPR02US	US	Spread Spectrum Baseband Modulation Of Magnetic Fields For Communications And Proximity Sensing	09/159,553	9/24/1998	6,393,045	5/21/2002
RTLSP00007BCIP01US	US	Object Identification System Employing Pulsed Magnetic Field-Stimulated, Tag-Embedded Transponder	09/159,554	9/24/1998	6,170,748	1/9/2001
RTLSP00008ANPR01US	US	Distributed Network For Multi-Lateration With Circularly Polarized Antenna For Hemispherical Coverage	09/390,030	9/2/1999	6,127,976	10/3/2000
RTLSP00009ANPR01US	US	Sub-Symbol Matched Filter-Based Frequency Error Processing For Spread Spectrum Communication Systems	09/159,242	9/23/1998	6,366,626	4/2/2002
RTLSP00010ANPR01US	US	Combined OOK-FSK/PPM Modulation And Communication Protocol Scheme Providing Low Cost, Low Power Consumption Short Range Radio Link	09/185,467	11/3/1998	6,434,194	8/13/2002
RTLSP00011ANPR01US	US	System And Method For Identifying Objects Using Single Connection Line	10/038,532	1/2/2002	6,655,582	12/2/2003

ZEBRA MATTER CODE	COUNTRY	TITLE	SERIAL NO.	FILED	PATENT NO.	ISSUED
RTLSPT00012ANPR01US	US	Geolocation System With Controllable Tags Enabled By Wireless Communications To The Tags	09/798,837	3/2/2001	6,859,485	2/22/2005
RTLSPT00013ANPR01US	US	Wireless Local Area Network With Geo-Location Capability	09/997,282	11/29/2001	6,987,744	1/17/2006
RTLSPT00014ANPR01US	US	Interference Suppression For Wireless Local Area Network And Location System	10/033,529	12/28/2001	6,892,054	5/10/2005
RTLSPT00015ANPR01US	US	Wireless Local Area Network System With Mobile Access Point Station Determination	10/023,481	12/17/2001	7,046,657	5/16/2006
RTLSPT00016ANPR01US	US	System And Method For Locating An Object Using Global Positioning System Receiver	10/137,746	5/2/2002	6,657,586	12/2/2003
RTLSPT00017ANPR01US	US	Real-Time Locating System And Method Using Timing Signal	10/138,795	5/3/2002	7,212,563	5/1/2007
RTLSPT00018ANPR01US	US	Location System And Method That Achieves Time Synchronized Network Performance Using Unsynchronized Receiver Clocks	10/980,855	11/3/2004	7,190,271	3/13/2007
RTLSPT00019ANPR01US	US	Location System And Method That Achieves Time Synchronized Network Performance With Nodes Divided Into Separate Networks	10/980,852	11/3/2004	7,218,229	5/15/2007
RTLSPT00021ADIV01US	US	Spread Spectrum Localizers	08/863,090	5/23/1997	6,002,708	12/14/1999
RTLSPT00021ADIV02US	US	Spread Spectrum Localizers	09/359,578	7/22/1999	6,385,268	5/7/2002
RTLSPT00021ADIV03US	US	Spread Spectrum Localizers	09/733,006	12/7/2000	6,400,754	6/4/2002
RTLSPT00021ADIV04US	US	Spread Spectrum Localizers	09/734,118	12/11/2000	6,795,491	9/21/2004
RTLSPT00021ANPR01US	US	Spread Spectrum Localizers	08/279,329	7/22/1994	5,748,891	5/5/1998
RTLSPT00022ANPR01US	US	Ultra-Wideband Monopole Large-Current Radiator	10/186,799	7/1/2002	6,650,302	11/18/2003
RTLSPT00023ANPR01US	US	Method And System For Capturing Vehicle Data Using An RF Transmitter	10/064,961	9/4/2002	6,778,888	8/17/2004
RTLSPT00027ANPR01US	US	Tag Mounting Device Used For Locating Shipping Containers And Truck Trailers	11/287,600	11/28/2005	7,475,814	1/13/2009

ZEBRA MATTER CODE	COUNTRY	TITLE	SERIAL NO.	FILED	PATENT NO.	ISSUED
RTLSPT00028ADIV01EP	EP	Wireless Local Area Network Receiver And Associated Method	10010815.8	3/29/2007	2262179	5/16/2012
RTLSPT00028ANPR01EP	EP	Wireless Local Area Network Receiver And Associated Method	07754142.3	3/29/2007	2005655	10/13/2010
RTLSPT00028ANPR01US	US	Wireless Local Area Network Receiver And Associated Method	11/692,250	3/28/2007	8,768,343	7/1/2014
RTLSPT00028BCIP01US	US	Method, Apparatus, And Computer Program Product For Wireless Signal Storage With Signal Recognition Detection Triggering	12/874,960	9/2/2010	8,892,065	11/18/2014
RTLSPT00028BCON02US	US	Method, Apparatus, And Computer Program Product For Wireless Signal Storage With Signal Recognition Detection Triggering	14/529,970	10/31/2014		
RTLSPT00028BNPR01CA	CA	Method, Apparatus, And Computer Program Product For Wireless Signal Recognition Detection Triggering	2,773,111	9/3/2010		
RTLSPT00028BNPR01CN	CN	Method, Apparatus, And Computer Program Product For Wireless Signal Recognition Detection Triggering	201080049740.4	9/3/2010	ZL201080049740.4	11/19/2014
RTLSPT00028BNPR01EP	EP	Method, Apparatus, And Computer Program Product For Wireless Signal Storage With Recognition Detection Triggering	10774020.1	9/3/2010	2473864	6/18/2014
RTLSPT00028BPCT01WO	WO	Method, Apparatus, And Computer Program Product For Wireless Signal Recognition Detection Triggering	PCT/US2010/047792	9/3/2010		
RTLSPT00028BPRV01US	US	Method, Apparatus, And Computer Program Product For Wireless Signal Storage With Signal Recognition Detection Triggering	61/239,492	9/3/2009		
RTLSPT00030ACON01US	US	Receiver For Object Locating And Tracking Systems And Related Methods	13/570,028	8/8/2012		
RTLSPT00030ANPR01UK	GB	Receiver For Object Locating And Tracking Systems And Related Methods	0819500.0	4/5/2007	2452640	12/8/2010

ZEBRA MATTER CODE	COUNTRY	TITLE	SERIAL NO.	FILED	PATENT NO.	ISSUED
RTLSP100030ANPRO1US	US	Receiver For Object Locating And Tracking Systems And Related Methods	11/696,202	4/4/2007	8,265,191	9/11/2012
RTLSP100031ANPRO1US	US	System And Method For Tracking Assets Within A Monitored Environment	11/624,848	1/19/2007	7,916,023	3/29/2011
RTLSP100031ANPRO1EP	EP	System And Method For Tracking Assets Within A Monitored Environment	07709858.0	1/23/2007		
RTLSP100032ANPRO1US	US	System And Method For Determining Signal Source Location In Wireless Local Area Network	11/668,569	1/30/2007		
RTLSP100033ANPRO1US	US	Wireless Local Area Network System And Receiver Adapted For Use Thereof And Associated Method	11/696,744	4/5/2007		
RTLSP100033ANPRO1EP	EP	Wireless Area Local Network System And Receiver Adapted For Use Thereof And Associated Method	07774989.3	4/6/2007	2011279	11/24/2010
RTLSP100034ANPRO1US	US	System And Method For Determining The Entry Or Exit Lane Of Vehicles Passing Into Or From A Vehicle Lot Using Tag Interrogator And RSSI	11/942,916	11/20/2007		
RTLSP100035ACON01US	US	Real-Time Location System Using Tag Interrogator And Embedded Or Fixed Tag Transmitters	13/039,000	3/2/2011		
RTLSP100035ANPRO1US	US	Real-Time Location System Using Tag Interrogator Embedded Or Fixed Tag Transmitters	11/938,866	11/13/2007	7,916,026	3/29/2011
RTLSP100036ANPRO1US	US	Location System For Wireless Local Area Network (WLAN) Using RSSI And Time Difference Of Arrival (TDOA) Processing	11/949,080	12/3/2007	7,899,006	3/1/2011
RTLSP100036ANPRO1EP	EP	Location System For Wireless Local Area Network (WLAN) Using RSSI And Time Difference Of Arrival (TDOA) Processing	07862460.8	12/4/2007	2092364	4/9/2014

ZEBRA MATTER CODE	COUNTRY	TITLE	SERIAL NO.	FILED	PATENT NO.	ISSUED
RTLSPT00037ANPR01EP	EP	System And Method For Tracking Vehicles And Containers	08725462.9	2/12/2008	2111600	5/14/2014
RTLSPT00037ANPR01US	US	System And Method For Tracking Vehicles And Containers	12/028,894	2/11/2008	7,755,541	7/13/2010
RTLSPT00037BCIP01US	US	System, Apparatus And Method For Locating And/Or Tracking Assets	12/169,742	7/9/2008		
RTLSPT00038ANPR01US	US	Flow Metering Of Vehicles Using RTLS Tracking	12/103,386	4/15/2008		
RTLSPT00050ADIV01US	US	Frequency Channel Diversity For Real-Time Locating Systems, Methods, And Computer Program Products	14/323,534	7/3/2014		
RTLSPT00050ANPR01US	US	Frequency Channel Diversity For Real-Time Locating Systems, Methods, And Computer Program Products	12/836,164	7/14/2010	8,786,495	7/22/2014
RTLSPT00050ANPRO01CN	CN	Frequency Channel Diversity For Real-Time Locating Systems, Methods, And Computer Program Products	201180042681.2	7/14/2011		
RTLSPT00050APCT01WO	WO	Frequency Channel Diversity For Real-Time Locating Systems, Methods, And Computer Program Products	PCT/US2011/043940	7/14/2011		
RTLSPT00050APR01DE	DE	Frequency Channel Diversity For Real-Time Locating Systems, Methods, And Computer Program Products	112011102332.4	7/14/2011		
RTLSPT00051ANPR01CN	CN	Method And Apparatus For Determining System Node Positions And Performing Temperature Compensation	201180044429.5	7/15/2011		
RTLSPT00051ANPR01US	US	Method And Apparatus For Determining System Node Positions	13/184,191	7/15/2011		
RTLSPT00051APCT01WO	WO	Method And Apparatus For Determining System Node Positions And Performing Temperature Compensation	PCT/US2011/044243	7/15/2011		

ZEBRA MATTER CODE	COUNTRY	TITLE	SERIAL NO.	FILED	PATENT NO.	ISSUED
RTLSP00051APR01EP	EP	Method And Apparatus For Determining System Node Positions And Performing Temperature Compensation	11749028.4	7/15/2011		
RTLSP00051APRV01US	US	Method And Apparatus For Determining System Node Positions And Performing Temperature Compensation	61/369,981	8/2/2010		
RTLSP00051APRV02US	US	Dart Ultra-Wideband (UWB)	61/364,703	7/15/2010		
RTLSP00051NPR02US	US	Method And Apparatus For Performing Temperature Compensation	13/184,172	7/15/2011	8,705,671	4/22/2014
RTLSP00053ACON1US	US	Communication And Distance Measurements In An Addressed Wide Band RFID System	13/464,326	5/4/2012		
RTLSP00053ANPR01US	US	Communication And Distance Measurement In An Addresses Wide Band RFID System	11/574,883	3/8/2007	8,193,913	6/5/2012
RTLSP00054ACON01US	US	Wide-Area Dynamic RFID System Using UWB	14/529,991	10/31/2014		
RTLSP00054ANPR01US	US	Wide-Area Dynamic RFID System Using UWB	12/066,697	8/19/2008	8,896,421	11/25/2014
RTLSP00055ACON01US	US	Virtual Group Maintenance And Security	13/433,150	3/28/2012	9,060,000	6/16/2015
RTLSP00055ANPR01US	US	Virtual Group Maintenance And Security	12/092,583	10/12/2008	8,169,319	5/1/2012
RTLSP00056ANPR01US	US	Array Of Very Light Readers For Active RFID And Location Applications	12/523,734	3/11/2010		
RTLSP00057ACON01US	US	Active Virtual Fence Using Mesh Networked RF Tags	14/518,629	10/20/2014		
RTLSP00057ANPR01US	US	Active Virtual Fence Using Mesh Networked RF Tags	12/530,223	1/14/2010	8,890,677	11/18/2014
RTLSP00058ANPR01US	US	Low Power Fast Impulse Radio Synchronization	11/568,981	11/13/2006	7,756,230	7/13/2010
RTLSP00059ACON01US	US	Media Access Control (MAC) For An Active RFID System	13/803,494	3/14/2013	9,036,505	5/19/2015

ZEBRA MATTER CODE	COUNTRY	TITLE	SERIAL NO.	FILED	PATENT NO.	ISSUED
RTLSP100059ACON02US	US	Media Access Control (MAC) For An Active RFID System	14/683,363	4/10/2015		
RTLSP100059ANPR01US	US	Media Access Control (MAC) For An Active RFID System	12/018,228	1/23/2008	8,422,398	4/16/2013
RTLSP100062ANPR01US	US	RFID-UWB System Connected To WLAN Infrastructure	11/997,745	2/3/2008	7,714,698	5/11/2010
RTLSP100063ANPR01US	US	Wide Band RFID System With Tag On Flexible Label	11/318,472	12/28/2005	7,504,952	3/17/2009
RTLSP100064ANPR01US	US	Ultra Wideband On-Chip Pulse Generator	12/354,108	1/15/2009	8,427,242	4/23/2013
RTLSP100065ANPR01US	US	Method, Apparatus, And Computer Program Product For Processing Received Signals For Locating	13/411,220	3/2/2012		

PATENT

REEL: 036503 FRAME: 0643

RECORDED: 08/28/2015