

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT3358937

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	IXYS CH GMBH	05/15/2015
RECEIVING PARTY DATA		
Name:	IXYS INTL LIMITED	
Street Address:	103 SOUTH CHURCH STREET	
Internal Address:	HARBOUR PLACE, 4TH FL, PO BOX 1034	
City:	GRAND CAYMAN	
State/Country:	CAYMAN ISLANDS	
Postal Code:	KY1-1102	
PROPERTY NUMBERS Total: 10		
	Property Type	Number
	Patent Number:	7436345
	Patent Number:	7346095
	Patent Number:	7742552
	Patent Number:	8320428
	Patent Number:	6954083
	Patent Number:	7296187
	Patent Number:	7152010
	Patent Number:	6907374
	Patent Number:	7342984
	Patent Number:	7340023
CORRESPONDENCE DATA		
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PATENT

ATTORNEY DOCKET NUMBER:	IXYS CH TO IXYS CAYMAN14
NAME OF SUBMITTER:	DARIEN K WALLACE
SIGNATURE:	/Darien K Wallace/
DATE SIGNED:	05/19/2015
Total Attachments: 6 source=Assignment IXYS CH GmbH to IXYS Intl Cayman#page1.tif source=Assignment IXYS CH GmbH to IXYS Intl Cayman#page2.tif source=Assignment IXYS CH GmbH to IXYS Intl Cayman#page3.tif source=Assignment IXYS CH GmbH to IXYS Intl Cayman#page4.tif source=Assignment IXYS CH GmbH to IXYS Intl Cayman#page5.tif source=Assignment IXYS CH GmbH to IXYS Intl Cayman#page6.tif	

ASSIGNMENT

THIS ASSIGNMENT is made the 15th day of May 2015

BETWEEN:

IXYS CH GmbH, a Swiss limited liability company with a business address at Mattenstrasse 6, 2555 Bruegg bei Biel, Switzerland (hereinafter referred to as the "Assignor") of the one part

and

IXYS Intl Limited, a Cayman Islands company with a business address at P.O. Box 1034, Harbour Place, 4th Fl., 103 South Church St., Grand Cayman KY1-1102, Cayman Islands (hereinafter referred to as the "Assignee") of the other part.

WHEREAS:

1. The Assignor is the owner of the patents and Patent Property listed in Exhibit A ("the Patent Property").
2. In pursuance of an agreement between the Assignor and Assignee, the Assignor has agreed to assign all right title and interest in the Patent Property to the Assignee.

WHEREAS

In consideration for the payment of \$1000 USD by the Assignee to the Assignor, the receipt and sufficiency of which is hereby acknowledged:

1. The Assignor hereby assigns all his rights title and interest in the Patent Property, including right to request limitation and/or revocation of patents granted for the Patent Property, with the intent that the Assignee shall have and hold the rights, title and interest hereby assigned as fully and entirely as the same would have been held and enjoyed by the Assignor had this assignment not been made and to the extent that any patents granted pursuant to the Patent Property shall vest in the Assignee including the right to take action and claim damages and other remedies in respect of any infringements of the patent application before on or after the date hereof and to retain any damages obtained as a result of such action.
2. The Assignor hereby UNDERTAKES that at the request and cost of the Assignee or its successors or assigns, it will at all times hereafter promptly do all such acts and execute all such documents as may be reasonably necessary or desirable to secure the vesting in the Assignee or its successors or assigns of all rights, title and interest assigned to the Assignee hereunder.

PATENT

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3. The Assignor hereby UNDERTAKES to confirm the title of the Assignee or its successors or assigns to all rights, title and interest assigned to the Assignee hereunder and to assist in the resolution of any question concerning the Patent Property.
4. This assignment and undertaking shall be binding upon the Assignor's heirs, executors, administrators, successors and/or assigns and shall enure to the benefit of any heirs, executors, administrators, successors and/or assigns of the Assignee.
5. This assignment is governed by Swiss law.

AS WITNESS the signature of (or of duly authorised officers of) the parties hereto the day and year first before written

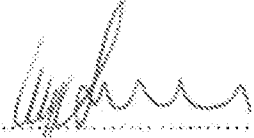
SIGNED for and on behalf of
the ASSIGNOR

)
)

Signature

Name:

Position:

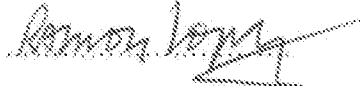

UZI SASSON
Director

Witness

Signature:

Name:

Address:


Ramon Lopez
1570 Buckeye Dr.
Milpitas, CA 95035

SIGNED for and on behalf of
the ASSIGNEE

)
)

Signature

Name:

Position:

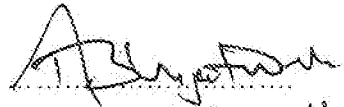

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Docket	Serial No.	Patent No.	Inventors	Filed	Issued	Status	Title
ZIL-848	12/590,084	8,106,807	Steven M. Pope	10/30/2009	1/31/2012	patented	Network Master For Wireless Fluorescent Lamp Lighting Control Networks
ZIL-848-1C	13/255,420	8,188,686	Steven M. Pope	1/20/2012	5/29/2012	patented	System and Method for Processing and Forwarding Transmitted Information
ZIL-847	12/587,106	8,184,674	Steven M. Pope	9/30/2009	5/22/2012	patented	Time-Hopping Low-Power Wireless Network For Turning Off And On Fluorescent Lamps
ZIL-846	12/587,062	8,653,935	Murray C. Baker	9/30/2009	2/18/2014	patented	Low-Power Wireless Network Beacon For Turning Off And On Fluorescent Lamps
ZIL-845	12/587,169		Kamlaipati et al.	10/3/2009		pending	Dimming a Multi-Lamp Fluorescent Light Fixture By Turning Off an Individual Lamp
ZIL-844	12/587,130		Kamlaipati et al.	10/3/2009		pending	Turning Off Multiple Fluorescent Lamps Using RF-Enabled Lamp Starter Units
ZIL-843	12/587,152		Saabo et al.	10/12/2009		pending	Registering a Replaceable RF-Enabled Fluorescent Lamp Starter Unit to a Master Unit
ZIL-840	12/583,167	8,587,415	Christopher W. Followell	03/26/2009	1/17/2013	patented	Receiving an IR Control Signal Through a Fresnel Lens of a Motion Sensor
ZIL-839	12/291,574	8,165,832	Low et al.	11/12/2008	4/24/2012	patented	Wall Plug Power Monitor
ZIL-829	12/296,562	8,754,584	Lloyd et al.	9/30/2008	6/17/2014	patented	Pulse Matching Delay-Locked Loop
ZIL-802	12/319,775	8,074,033	Gyle D. Yearsley	11/2/2009	12/6/2011	patented	Cooperating Memory Controllers that Share Data Bus Terminals for Accessing Wide External Devices
ZIL-780-1C	13/317,674	8,244,994	Gyle D. Yearsley	10/25/2011	8/14/2012	patented	Cooperating Memory Controllers that Share Data Bus Terminals for Accessing Wide External Devices
ZIL-778	12/229,574		Roberts et al.	8/22/2008		pending	Bit-Flipping Memory Controller to Prevent Data Remanence
ZIL-773	12/154,611	7,675,447	David S. Coulson	5/24/2008	3/9/2010	patented	Low-Cost and Noise-Insensitive Motion Detector
ZIL-772	12/221,161	8,210,440	Hoang Minh Phai	7/31/2008	7/3/2012	patented	Low-Cost Magnetic Stripe Reader Using Independent Switching Thresholds
ZIL-772-1C	13/482,991	8,356,759	Hoang Minh Phai	5/29/2012	1/22/2013	patented	Low-Cost Magnetic Stripe Reader Using Independent Switching Thresholds
ZIL-764	12/214,479	7,583,494	Stortini et al.	3/23/2010	3/23/2010	patented	Press-Fit Integrated Circuit Package Involving Compressed Spring Contact Beams
ZIL-764-1C	13/657,094	7,984,489	Stortini et al.	1/12/2010	2/6/2011	patented	Press-Fit Integrated Circuit Package Involving Compressed Spring Contact Beams
ZIL-744	11/904,749	7,998,090	David D. Eaton	9/28/2007	3/1/2011	patented	General Purpose Ball Grid Array Security Cap
ZIL-744-1C	12/932,141	8,198,142	David D. Eaton	4/27/2007	12/8/2009	patented	Switch-Free Clock Multiplexer That Provides an Output Clock Signal Based on Edge Detection
ZIL-725	11/796,844	7,629,628	Joshua J. Neki	4/27/2009	2/22/2011	patented	Switch-Free Clock Multiplexer That Provides an Output Clock Signal Based on Edge Detection
ZIL-725-1C	12/986,590	7,993,748	Joshua J. Neki	1/31/2007	12/14/2010	patented	Frequency Trimming for Internal Oscillator for Test-Time Reduction
ZIL-678	11/701,137	7,952,099	Paul G. Clark	11/27/2010	11/15/2011	patented	Frequency Trimming for Internal Oscillator for Test-Time Reduction
ZIL-678-1C	12/927,843	8,058,893	Paul G. Clark	11/17/2009	6/8/2010	patented	Microcontroller Having In-Situ Autocalibrated Integrating Analog-to-Digital Converter
ZIL-662	11/601,003	7,414,553	Anatoliy V. Tsyrganovich	8/15/2008	6/8/2010	patented	Microcontroller Having In-Situ Autocalibrated Integrating Analog-to-Digital Converter
ZIL-662-1C	12/228,824	7,733,250	Anatoliy V. Tsyrganovich	6/30/2008	9/18/2012	patented	Open-Loop Transimpedance Amplifier for Infrared Diodes
ZIL-654	11/479,037	8,269,562	David R. Staab	8/12/2012	12/18/2012	patented	Blank Bit And Processor Instructions Employing The Blank Bit
ZIL-654-1C	13/572,688	8,334,724	David R. Staab	2/1/2005	8/12/2014	patented	Blank Bit And Processor Instructions Employing The Blank Bit
ZIL-649	11/345,803	8,606,183	Gyle D. Yearsley	4/8/2014		pending	Blank Bit And Processor Instructions Employing The Blank Bit
ZIL-649-1C	14/248,283		Gyle D. Yearsley				Determining the Distance an Object Has Moved Using an Accelerometer
ZIL-646	11/039,233	7,688,307	Anatoliy V. Tsyrganovich	1/24/2006	3/30/2010	patented	Conditional Back-to-Back Interrupt Vectoring
ZIL-642	11/406,059	7,450,966	Hidetomi Hattori	4/18/2006	12/2/2008	patented	Clock Input Filter Circuit
ZIL-639	11/771,453	8,051,235	Yearsley et al.	11/1/2006	11/1/2011	patented	Clock Input Filter Circuit
ZIL-631	11/495,477	7,411,427	Steven K. Fong	7/28/2006	8/22/2008	patented	Clock Input Filter Circuit
ZIL-631-1C	12/221,783	7,592,843	Steven K. Fong	8/5/2008	9/3/2010	patented	Clock Input Filter Circuit
ZIL-631-2C	12/564,803	7,768,319	Steven K. Fong	7/9/2010	4/19/2011	patented	Clock Input Filter Circuit
ZIL-631-3C	12/603,907	7,928,772	Steven K. Fong	3/18/2006	4/22/2008	patented	Chopping And Oversampling ADC Having Reduced Low Frequency Drift
ZIL-628	11/378,785	7,362,255	Anatoliy V. Tsyrganovich	4/29/2005	3/24/2009	patented	ESD Protection Transistor
ZIL-628-1C	12/148,715	7,551,110	Anatoliy V. Tsyrganovich	4/29/2005	10/5/2010	patented	ESD Protection Transistor
ZIL-627	11/115,680	7,508,038	Ransom et al.	3/24/2009	4/19/2011	patented	ESD Protection Transistor
ZIL-627-1C	12/383,534	7,887,528	Ransom et al.	9/10/2010	11/2/2011	patented	ESD Protection Transistor
ZIL-627-2C	12/807,669	7,827,944	Ransom et al.	4/2/2011	11/2/2011	patented	ESD Protection Transistor
ZIL-627-3C	13/065,940	8,062,941	Ransom et al.	9/29/2011	11/2/2012	patented	Linearity Correction For Analog-To-Digital Converters
ZIL-627-4C	13/246,520	8,093,121	Ransom et al.	8/29/2006	8/19/2008	patented	Operation and Operand Inference for Extended-Precision Computation
ZIL-611	11/512,295	7,414,554	Anatoliy V. Tsyrganovich	11/1/2005	12/8/2009	patented	Operation and Operand Inference for Extended-Precision Computation
ZIL-609	11/265,421	7,415,559	Thomas Henry Hildebrandt	8/11/2008	12/12/2006	patented	Low-Voltage Bandgap Reference Circuit With Startup Control
ZIL-609-1C	12/328,223	7,631,165	Thomas Henry Hildebrandt	11/2/2009	10/4/2011	patented	Sample and Hold Time Stamp for Sensing Zero Crossing of Back Electromotive Force in 3-Phase Brushless DC Motors
ZIL-609-4C-1C	12/590,070		Thomas Henry Hildebrandt		9/30/2014	patented	Sample and Hold Time Stamp for Sensing Zero Crossing of Back Electromotive Force in 3-Phase Brushless DC Motors
ZIL-607	11/081,292	7,148,672	Steven L. Holmes	3/16/2005	5/25/2010	patented	Latent VBO Reset Circuit
ZIL-602	11/495,913	8,033,867	Rex L. Allison	7/29/2006	9/5/2006	patented	Temperature-Compensated RC Oscillator
ZIL-602-1C	13/134,141	8,358,093	Rex L. Allison	8/9/2005	2/13/2007	patented	Programmable Temperature-Compensated RC Oscillator
ZIL-602-2C	13/740,066	8,847,531	Rex L. Allison	1/1/2013	9/24/2013	patented	Controlling Transmission Power in an kDA/RC Transmitter Circuit
ZIL-597	11/448,514	7,725,769	David R. Staab	6/7/2006	5/1/2007	patented	Below-Ground Sensor Interface Amplifier
ZIL-596	11/026,750	7,102,452	Steven L. Holmes	12/3/2004	10/28/2008	patented	kDA/RC Transmitter Circuit Having Low Energy Consumption
ZIL-596-1P	11/200,329	7,176,765	Shorb et al.	8/9/2005	1/6/2009	patented	Recovering Energy From An kDA/Remote Control Transmitter Circuit
ZIL-591	11/437,984	8,543,062	Daniel SauFu Moi	8/21/2006		pending	
ZIL-591-1C	13/975,299		Daniel SauFu Moi	8/21/2006		pending	
ZIL-589	10/528,492	7,212,042	Hoang Minh Phai	8/27/2004		patented	
ZIL-587	10/956,506	7,444,080	Grace et al.	11/22/2004		patented	
ZIL-586	10/887,290	7,474,857	Alan Grace	7/21/2004		patented	

ZIL-585-1C	12/315,214	8,682,168	Alan Grace	12/21/2008	3/25/2014	patented	Recovering Energy From An IrDA/Remote Control Transmitter Circuit
ZIL-586-2C	14/084,172			10/27/2013	pending		Recovering Energy From An IrDA/Remote Control Transmitter Circuit
ZIL-584-1D	10/651,460	7,127,538	Joshua J. Neki	5/21/2004	patented		Single-Pin Serial Communication Link With Start-Bit Flow Control
ZIL-584-2D	10/651,882	7,260,660	Joshua J. Neki	5/21/2004	patented		Flow Control By Supplying A Remote Start Bit Onto A Single-wire Bus
ZIL-584-2D-1C	11/693,333	7,574,544	Joshua J. Neki	8/15/2007	patented		Flow Control By Supplying A Remote Start Bit Onto A Single-wire Bus
ZIL-579	10/844,901	6,993,441	Anatoliy V. Tsyrganovich	5/12/2004	patented		Adaptive Error Correction in an Oversampled ADC
ZIL-579-1C	11/267,722	7,095,663	Anatoliy V. Tsyrganovich	11/4/2005	patented		Adaptive Error Correction in an Oversampled ADC
ZIL-579-1C-1P	11/472,192	7,379,831	Anatoliy V. Tsyrganovich	8/20/2006	patented		Error Correction in an Oversampled ADC Using Few Stored Calibration Coefficients
ZIL-576	10/788,180	7,508,057	Alan Grace	2/25/2004	patented		IrDA Transceiver Module That Also Functions As Remote Control IR Transmitter
ZIL-576-1C	12/383,510	7,711,269	Alan Grace	3/24/2009	patented		IrDA Transceiver Module That Also Functions As Remote Control IR Transmitter
ZIL-576-2C	12/738,678	7,962,041	Alan Grace	4/9/2010	patented		IrDA Transceiver Module That Also Functions As Remote Control IR Transmitter
ZIL-576-1C	10/938,576	7,336,076	Provis et al.	8/27/2004	patented		Generating A Mark-Space Table And A String Of Timing Information On A Remote Control Device
ZIL-570-2D	10/928,520	7,339,513	Provis et al.	8/27/2004	patented		Interpreting A Script To Generate An Operational Signal On A Remote Control Device
ZIL-570-3D	10/928,501	7,227,492	Provis et al.	8/27/2004	patented		Interpreting A Common Script Block To Output Various Forms Of Data According To A Common Protocol
ZIL-570-4D	10/928,830	7,362,256	Provis et al.	8/27/2004	patented		Loading A Machine Code API Onto An 8-Bit Virtual Machine To Enable New Functionality
ZIL-570-4D-1C	12/148,925	8,962,840	Provis et al.	4/22/2008	patented		Loading A Machine Code API Onto An 8-Bit Virtual Machine To Enable New Functionality
ZIL-570-4D-1C-2C	14/617,928		Provis et al.	2/9/2015	pending		Loading A Machine Code API Onto An 8-Bit Virtual Machine To Enable New Functionality
ZIL-570-6D	10/928,502	7,230,562	Provis et al.	8/27/2004	patented		Sending A Script To A Virtual Machine And Its Use On Resource-Constrained Devices
ZIL-570-7D	10/928,014	7,436,345	Provis et al.	8/27/2004	patented		A Compact Register-Based Virtual Machine And Its Use On Resource-Constrained Devices
ZIL-564	10/783,338	7,346,095	Hilde Hattori	2/20/2004	patented		Spread Spectrum Clock Generator with Controlled Delay Elements
ZIL-564-1C	12/077,282	7,742,552	Hilde Hattori	3/17/2008	patented		Spread Spectrum Clock Generator with Controlled Delay Elements
ZIL-564-2C	12/603,100	8,320,428	Hilde Hattori	6/19/2010	patented		Spread Spectrum Clock Generator with Controlled Delay Elements
ZIL-562	10/750,232	6,954,083	Thornley et al.	12/29/2003	patented		Circuit For Deflection Of Hardware Faults Due To Temporary Power Supply Fluctuations
ZIL-553	10/619,544	7,296,187	Fritz et al.	7/14/2003	patented		Hardware Debug Device Having Script-Based Host Interface
ZIL-548-1P	11/087,784	7,162,010	Anatoliy V. Tsyrganovich	3/23/2005	patented		Calibrating An Analog-to-Digital Converter Using A Test Signal with a Precise dc Voltage
ZIL-548	10/354,114	6,907,374	Anatoliy V. Tsyrganovich	3/19/2003	patented		Self-Calibrating Sigma-Delta Analog-to-Digital Converter
ZIL-543-1P	10/407,390	7,342,984	Yearsley et al.	4/3/2003	patented		Counting Clock Cycles Over The Duration Of A First Character And Using a Remainder Value To Determine When to Sample A Bit Of A
ZIL-543-1C	11/518,048	7,340,023	Yearsley et al.	9/9/2006	patented		Auto Baud System And Method And Single Pin Communication Interface
ZIL-543	10/284,500	7,116,739	Yearsley et al.	10/31/2002	patented		Auto Baud System And Method And Single Pin Communication Interface
ZIL-537-1P	10/821,517	7,066,197	Anatoliy V. Tsyrganovich	4/9/2004	patented		ADC With Reduced Quantization Noise and Programmable Bit Resolution
ZIL-537	10/331,037	6,839,010	Anatoliy V. Tsyrganovich	12/27/2002	patented		Sigma-Delta Analog-To-Digital Converter With Reduced Quantization Noise
ZIL-528	09/113,036	6,281,999	Watson et al.	7/6/1998	patented		Optics System For Infrared Signal Transceivers
ZIL-524-1C	11/146,246	7,353,327	Jeffrey R. Dorst	6/3/2005	patented		A Dedicated Command Port For Memory Controllers
ZIL-524	09/971,196	6,941,416	Jeffrey R. Dorst	10/4/2001	patented		Apparatus And Methods For Dedicated Command Port in Memory Controllers
ZIL-G523	09/909,507	6,915,414	Cyle D. Yearsley	7/20/2001	patented		Context Switching Pipelined Microprocessor
ZIL-522	10/038,091	6,614,253	Anatoliy V. Tsyrganovich	1/3/2002	patented		Scan Velocity Modulation Technique
ZIL-521-1P-1P	11/305,291	7,091,795	Anatoliy V. Tsyrganovich	12/16/2005	patented		Modulating Ramp Angle in a Digital Frequency Locked Loop
ZIL-521-1P	10/680,874	7,002,415	Anatoliy V. Tsyrganovich	10/21/2003	patented		Analog Frequency Locked Loop
ZIL-G521	09/973,979	6,636,122	Anatoliy V. Tsyrganovich	10/9/2001	patented		Frequency Locked Loop
ZIL-G520	09/981,579	6,522,091	Anatoliy V. Tsyrganovich	10/7/2001	patented		Circuit and Method That Allows the Amplitudes of Vertical Correction Signal Components to be Adjusted
ZIL-519-1C-1P	10/876,358	7,176,239	Anatoliy V. Tsyrganovich	6/23/2004	patented		Circuit and Method for Reducing East-West Geometry Mismatch Between the Top and Bottom of a Raster Display
ZIL-519-1C	10/820,237	7,766,217	Anatoliy V. Tsyrganovich	4/5/2004	patented		Circuit and Method for Reducing East-West Geometry Mismatch Between the Top and Bottom of a Raster Display
ZIL-519	10/033,824	6,717,377	Anatoliy V. Tsyrganovich	10/31/2001	patented		Circuit and Method for Reducing East-West Geometry Mismatch Between the Top and Bottom of a Raster Display
ZIL-511	10/402,401	6,768,440	Bruce Troutman	3/28/2003	patented		Digital-To-Analog Converters With Reduced Parasitics and Associated Methods
ZIL-314	06/664,858	7,865,443	Alvarez et al.	9/5/2000	patented		Method and System for Electronic Data Sales and Distribution Over Wide Area Computer Networks
ZIL-G406	08/982,433	5,949,953	DAVID CARROLL FRITZ	10/31/1997	patented		Method for the Generation of ISA Simulators and Assemblers from a Machine Language
ZIL-G401	08/195,311	5,841,365	JOSEPH S. RIMKUS	2/10/1994	patented		Method and Apparatus for Communicating with a Product Label
ZIL-G400	08/125,518	5,687,061	THOMAS E. KRUEGER	8/28/1998	patented		Method and Apparatus for Providing Information Concerning Products Using Radio Frequency Transmissions
ZIL-305-1C	11/090,161	7,212,749	Hamilton et al.	3/15/2005	patented		METHOD AND APPARATUS FOR SPREAD SPECTRUM COMMUNICATIONS
ZIL-306	09/212,203	6,945,083	Hamilton et al.	12/15/1998	patented		Signal Receiver Having Wide Band Amplification Capability
ZIL-303-1C	09/143,150	6,317,235	T. ALLAN HAMILTON	8/28/1998	patented		Signal Receiver Having Wide Band Amplification Capability
ZIL-303	10/349,735	7,123,840	T. Allan Hamilton	1/22/2003	patented		Method and System for Preventing Burn-out of Infrared Transmitter Diodes
ZIL-302	09/131,825	6,590,582	T. Allan Hamilton	8/10/1998	patented		Infrared Signal Communication System and Method Including Transmission Means Having Automatic Gain Control
ZIL-300-1P-1C	11/596,956	7,702,244	Hamilton et al.	10/25/2006	patented		Infrared Signal Communication System and Method Including Transmission Means Having Automatic Gain Control
ZIL-300-1P-1C	09/580,224	7,181,144	Hamilton et al.	4/28/2000	patented		Method and System for Enabling Wireless Data Communications with Electronic Devices Having Disparate Operating Systems
ZIL-518	09/518,364	6,642,112	Lowe et al.	7/30/2001	patented		Circuit Design and Optics System for Infrared Signal Transceivers
ZIL-254	09/135,154	7,221,295	T. Allan Hamilton	8/17/1998	patented		Improved Circuit Design and Optics System for Infrared Signal Transceivers
ZIL-244-1C	10/658,058	6,970,993	Troutman et al.	9/8/2003	patented		Non-Oxidizing Spacer Denatification Method for Manufacturing Semiconductor Devices
ZIL-244	09/845,466	6,643,760	Troutman et al.	5/22/2007	patented		System and Method for Providing an Improved Standby Mode for Infrared Data Transceivers
ZIL-G235	09/567,948	6,340,903	James W. Leith	5/10/2000	patented		Architecture to Relax Memory Performance Requirements
ZIL-G232	09/539,764	6,339,368	James W. Leith	3/31/2000	patented		Architecture to Relax Memory Performance Requirements
ZIL-G231	09/511,512	6,255,902	Troy N. Gilliland	2/23/2000	patented		Auto-Zero Feedback Sample-and-Hold System
							Circuit for Automatically Having Mechanical Device at Its Resonance Frequency
							Switch Amplifier Circuit

ZILG230	09/5/70,420	5,304,111	Mohammad R. Pijabari	5/12/2000	10/16/2001	patented	CMOS Switch circuit Having Concurrently Switching Complementary Outputs Independent From Process Variations
ZILG237	09/504,463	6,833,876	Mohammad R. Pijabari	2/16/2000	12/21/2004	patented	Using a Reduced Memory Lookup Table for Gamma Correction Through Interpolation
ZILG222	09/460,442	6,359,425	MHAI MANOLESCU	12/13/1999	3/19/2002	patented	Current Regulator with Low Voltage Detection Capability
ZILG221	09/430,474	6,219,279	MHAI MANOLESCU	10/29/1999	4/17/2001	patented	Non-Volatile Memory Program Driver and Read Reference Circuits
ZILG220	09/398,257	6,502,181	CRAIG MACKENNA	9/17/1999	12/31/2002	patented	Method and Apparatus for an Enhanced Processor
ZILG216	09/452,862	6,564,334	Dennis G. Zaffiro	12/1/1999	5/13/2003	patented	Memory Mapped Programmable Generator Outputting Series of Events with Timing Derived from Event Block
ZILG212	09/374,378	6,154,066	MHAI C. MANOLESCU	8/13/1999	1/28/2000	patented	Low Ripple Power Distribution System
ZILG209	09/538,078	6,529,246	Anatoliy V. Tsyrganovich	3/29/2000	3/4/2003	patented	Method and Apparatus for Improved Signal Restoration
ZILG208	09/354,884	6,323,091	SUNGKWOON LEE	7/16/1999	1/17/2001	patented	Method of Forming Semiconductor Memory Device with LDD
ZILG207	09/359,259	6,424,384	ANATOLIY V. TSYRGANOVIC	7/22/1999	7/23/2002	patented	Method and Apparatus for Improved Signal Filtering
ZILG206	09/440,359	6,574,682	STEPHEN H. CHAN	11/23/1999	6/3/2003	patented	Data Flow Enhancement for Processor Architectures with Cache
ZIL-204	05/231,544	7,060,584	Chun et al.	7/12/1999	6/13/2006	patented	Process To Improve High-Performance Capacitors in Integrated MOS Technologies
ZIL-204-1C	11/289,262	7,768,052	Carns et al.	11/29/2005	8/3/2010	patented	Process To Improve High-Performance Capacitors in Integrated MOS Technologies
ZIL-204-2C	12/804,414	8,017,475	Carns et al.	7/20/2010	9/13/2011	patented	Process To Improve High-Performance Capacitors in Integrated MOS Technologies
ZIL-204-3C	13/134,159	8,324,069	Carns et al.	5/31/2011	12/4/2012	patented	Phase and Frequency Locked Clock Generator
ZILG198	09/247,895	6,166,606	ANATOLIY V. TSYRGANOVIC	2/10/1999	12/26/2000	patented	High Voltage PMOS Level Shifter
ZILG193	08/253,432	6,300,795	BRUCE LEE TROUTMAN	2/19/1999	10/9/2001	patented	Method of Eliminating Gate Leakage in Nitrogen Annealed Oxides
ZILG192	09/260,913	6,165,846	TIMOTHY K. CARNS	3/21/1999	12/26/2000	patented	High Aspect Ratio Photolithographic Method for High Energy Implantation
ZILG191	09/346,246	6,576,405	STEPHAN J. BUFFAT	7/1/1999	6/10/2003	patented	Externally Synchronized Voltage Controlled Oscillator in Phase Locked Loop
ZILG187	08/951,139	6,018,273	ANATOLIY V. TSYRGANOVIC	10/15/1997	1/25/2000	patented	Low Voltage Charge Pump Circuit
ZIL-186	08/983,434	5,940,284	Bruce Lee Troutman	12/18/1997	8/17/1999	patented	Method of Fabricating a High Quality Thin Oxide
ZILG185	09/215,797	6,190,973	JOHN E. BERG	12/18/1998	2/20/2001	patented	Dot Craw Reduction in NTSC/PAL Graphic Encoder
ZILG184	08/940,122	6,163,346	ANATOLIY V. TSYRGANOVIC	9/29/1997	12/19/2000	patented	Circle Correction in Digital Low-Pass Filter
ZIL-183	08/937,877	7,138,037	Anatoliy V. Tsyrganovich	9/29/1997	11/21/2006	patented	Reduction of Color Transition Distortions in NTSC/PAL Encoder
ZILG182	08/939,156	5,995,164	ANATOLIY V. TSYRGANOVIC	9/29/1997	11/30/1999	patented	Reconfigurable Infinite Impulse Response Digital Filter
ZILG181	08/950,730	6,009,445	ANATOLIY V. TSYRGANOVIC	10/15/1997	12/28/1999	patented	Integrated Television Processor
ZIL-179	08/950,722	6,002,449	Anatoliy V. Tsyrganovich	10/15/1997	12/14/1999	patented	Method of Fabricating a MOS Device
ZIL-177-ID	09/643,717	6,436,195	Smythe et al.	8/22/2000	8/20/2002	patented	Method of Fabricating a MOS Device
ZIL-177	08/962,828	6,156,853	Smythe et al.	11/3/1997	12/5/2000	patented	Layout Solution for Electromagnetic Interference Reduction
ZILG176	09/158,713	5,969,590	JOHN KRANZEN	5/22/1998	10/19/1999	patented	Light Phase Grating Device
ZILG172	09/926,226	5,978,127	JOHN E. BERG	9/9/1997	11/2/1999	patented	In-Circuit Emulation System with Minimal Impact on Target Environment
ZILG166	08/797,932	5,960,190	CRAIG MACKENNA	7/25/1996	9/26/1999	patented	Flexible Interrupt System for an Integrated Circuit
ZIL-165	08/686,888	5,860,013	Stephen H. Chan	7/25/1996	11/21/1999	patented	IO Port and RAM Memory Addressing Technique
ZILG162	08/701,385	5,925,648	OSCAR AYZENBERG	8/22/1996	7/20/1999	patented	Apparatus and Method for Digital Amplitude and Phase Detection
ZILG134	08/673,264	5,786,865	OSCAR AYZENBERG	6/28/1996	7/28/1998	patented	Apparatus and Method for Data Synchronizing and Tracking
ZILG1300IV	09/469,935	5,349,122	GILBERT R. WOODMAN JR.	12/21/1999	2/19/2002	patented	Apparatus and Method for Data Synchronizing and Tracking
ZILG128	08/771,440	6,064,767	GILBERT R. WOODMAN JR.	12/20/1996	5/16/2000	patented	Asynchronous Analog or Digital Frequency Measurement on Digital Test Equipment
ZILG124DIV	08/577,607	6,099,161	IGOR FURLAN	10/24/1996	8/6/2000	patented	Method of Making MOS Precision Capacitor with Low Voltage Coefficient
ZILG124	08/738,984	5,750,426	KAMAL RAJAKANAN	3/18/1995	5/12/1998	patented	MOS Precision Capacitor with Low Voltage Coefficient
ZILG122	08/378,060	5,999,742	GRANT B. RICHARDS	12/6/1995	12/7/1999	patented	Dual Latch Data Transfer Pacing Logic Using a Timer to Maintain a Data Transfer Interval
ZILG119	08/311,951	5,812,634	CRAIG MACKENNA	9/26/1994	3/18/1997	patented	Circuit for Sensing Whether or not an Add-In Board is Inserted into a Bus Connector of a Mother Board
ZILG115	08/450,974	5,748,670	LYN R. ZASTROW	5/25/1995	1/19/1995	patented	Efficient Functional Test Scheme Incorporated in a Programmable Duration Binary Counter
ZILG112	08/287,868	5,528,242	NIRAJ KUMAR	8/9/1994	6/18/1996	patented	Method of Demodulating Chirp Spread Spectrum
ZILG111	08/248,965	5,479,125	JOHN TRAN	5/25/1994	12/26/1995	patented	Flash Analog-to-Digital Converter
ZILG109C2	08/698,426	6,072,462	ALEXANDR MOVSOVICH	7/30/1996	6/6/2000	patented	Frequency Multiplying Clock Signal Generator
ZILG109C	08/097,718	5,608,425	ALEXANDR MOVSOVICH	3/21/1995	3/4/1997	patented	Technique for Generating On-Screen Display Characters Using Software Implementation
ZILG106	08/136,231	5,369,377	BOUBEKUR BENHAMDA	10/13/1993	11/29/1994	patented	Circuit for Automatically Detecting Off-Chip, Crystal or On-Chip, RC Oscillator Option
ZILG104	08/179,492	5,389,565	ALEX GYURE	1/7/1994	2/14/1995	patented	Method of Fabricating High Threshold Metal Oxide Silicon Read-Only-Memory Transistors
ZILG104DIV	08/319,841	5,456,896	ALEX GYURE	10/7/1994	3/12/1995	patented	High Threshold Metal Oxide Silicon Read-Only-Memory Transistors
ZILG103C	08/626,183	5,602,537	MOYSE J. DALRYMPLE	3/29/1996	2/11/1997	patented	TECHNIQUE FOR ELIMINATING DATA TRANSFER MEMORY UNDERFLANS
ZILG102	08/001,602	5,495,554	R. TIMOTHY EDWARDS	1/6/1993	2/27/1996	patented	ANALOG WAVELET TRANSFORM CIRCUITY
ZILG101	08/027,066	5,537,564	ASHER HAZANCHUK	3/6/1993	7/16/1996	patented	TECHNIQUE FOR ACCESSING AND REFRESHING MEMORY LOCATIONS WITHIN ELECTRONIC STORAGE DEVICES WHICH NEE
ZILG098	08/051,639	5,428,561	DAVID BRYANT	4/22/1993	6/27/1995	patented	EFFICIENT PSEUDORANDOM VALUE GENERATOR
ZILG097	07/972,961	5,338,423	GREGORY HANDMAN	1/16/1992	8/16/1994	patented	METHOD OF ELIMINATING METAL VOIDING IN A TITANIUM NITRIDE/ALUMINUM PROCESSING
ZILG096C	08/409,800	5,579,200	KAMAL RAJAKANAN	3/24/1995	11/26/1996	patented	ELECTROSTATIC DISCHARGE PROTECTION FOR METAL-OXIDE-SILICON FEEDBACK ELEMENTS BETWEEN PINS
ZILG093CIP	08/085,030	5,619,681	BOUBEKUR BENHAMDA	6/30/1993	4/6/1997	patented	DELAYED FIFO STATUS FOR SERIAL SHIFT EMULATION
ZILG088C2	08/778,614	5,734,654	STEPHEN H. CHAN	1/6/1997	3/31/1998	patented	FAST INSTRUCTION DECODING IN A PIPELINE PROCESSOR
ZILG087	07/878,201	5,592,635	STEPHEN H. CHAN	7/15/1994	1/2/1997	patented	TECHNIQUE FOR ACCELERATING INSTRUCTION DECODING OF INSTRUCTION SETS WITH VARIABLE LENGTH OPERANDS IN A
ZILG085DIV	08/017,638	5,317,187	GREGORY HANDMAN	5/4/1992	5/31/1994	patented	SELF ARBITRATING AUTO RESETTABLE FLAG CIRCUIT
ZILG085	07/878,626	5,240,880	GREGORY HANDMAN	2/16/1993	8/31/1993	patented	TITANIUM CONTACT METALLIZATION
ZILG054	07/846,257	5,262,887	BOUBEKUR BENHAMDA	3/9/1992	1/15/1993	patented	DECODER CIRCUIT WITH BYPASS CIRCUITY AND REDUCED INPUT CAPACITANCE FOR GREATER SPEED

Exhibit A

IKYS CH GmbH patents

PATENT

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ZILG083	07/877,871	5,244,831	GREGORY HINDMAN	5/4/1992	9/14/1993	patented	METHOD OF DOPING A POLYSILICON LAYER ON A SEMICONDUCTOR WAFER
ZILG080	07/865,246	5,442,796	LYN R. ZASTROW	3/23/1992	8/15/1993	patented	PULSE GENERATOR AND DEMODULATOR WITH CONTROLLING PROCESSOR AND DECREMENTING COUNTERS
ZILG079C	08/084,350	5,293,562	STEVEN M. POPE	5/28/1993	3/8/1994	patented	DEVICE WITH MULTIPLEXED AND NON-MULTIPLEXED ADDRESS AND DATA I/O CAPABILITY
ZILG079	07/797,111	5,262,991	STEVEN M. POPE	1/12/1991	1/16/1993	patented	DEVICE WITH MULTIPLEXED AND NON-MULTIPLEXED ADDRESS AND DATA I/O CAPABILITY
ZILG076	07/553,732	5,319,753	CRAIG A. MACKENNA	9/29/1992	5/7/1994	patented	QUEUED INTERRUPT MECHANISM WITH SUPPLEMENTARY COMMAND/STATUS MESSAGE INFORMATION
ZILG075C	08/487,711	5,659,688	HANUMANTHRAO NIKSHAK	5/7/1995	8/19/1997	patented	TECHNIQUE AND CIRCUIT FOR PROVIDING TWO OR MORE PROCESSORS WITH TIME MULTIPLEXED ACCESS TO A SHARED RESOURCE
ZILG075	07/981,889	5,471,588	HANUMANTHRAO NIKSHAK	11/25/1992	1/28/1995	patented	TECHNIQUE AND CIRCUIT FOR PROVIDING TWO OR MORE PROCESSORS WITH TIME MULTIPLEXED ACCESS TO A SHARED RESOURCE
ZILG074	07/818,509	5,317,745	STEPHEN H. CHAN	1/10/1992	5/31/1994	patented	MINIMAL INTERRUPT LATENCY SCHEME USING MULTIPLE PROGRAM COUNTERS
ZILG073	07/817,465	5,428,252	ANDRE B. WALKER	1/3/1992	9/27/1995	patented	POWER SUPPLY INTERRUPTION DETECTION AND RESPONSE SYSTEM FOR A MICROCONTROLLER
ZILG072	07/679,739	5,265,038	PAK-ON KWOK	4/3/1991	1/23/1993	patented	COMPUTER SYSTEM PERIPHERAL CONNECTION PULSE FILTERING TECHNIQUE AND CIRCUIT
ZILG070	07/855,526	5,428,746	MONTÉ J. DALRYMPLE	3/23/1992	5/27/1995	patented	INTEGRATED MICROPROCESSOR UNIT GENERATING SEPARATE MEMORY AND INPUT-OUTPUT DEVICE CONTROL SIGNALS
ZILG068	07/735,403	5,145,715	BOUBEKEUR BEN-HAMIDA	7/26/1991	9/8/1992	patented	DOMINO-LOGIC DECODER
ZILG067	07/753,729	5,263,166	DIMITRI C. DESMONS	9/3/1991	11/16/1993	patented	TECHNIQUE OF PROGRAMMING INTEGRATED CIRCUIT CONTROL REGISTERS
ZILG064	07/661,298	5,345,264	BRADLEY D. JENSEN	3/31/1992	9/6/1994	patented	SERIAL COMMUNICATION PERIPHERAL INTEGRATED ELECTRONIC CIRCUIT THAT RECOGNIZES ITS UNIQUE ADDRESS BEFORE DATA TRANSFER CIRCUIT FOR INTERFACING TWO BUS SYSTEMS THAT OPERATE ASYNCHRONOUSLY WITH RESPECT TO EACH OTHER
ZILG063	07/688,244	5,278,957	STEPHEN H. CHAN	4/16/1991	1/11/1994	patented	EXTERNALLY TRIMMED INTEGRATED CIRCUIT RC OSCILLATOR
ZILG061	07/658,004	5,093,533	BOUBEKEUR BEN-HAMIDA	2/20/1991	3/3/1992	patented	INTEGRATED POWER-ON RESET CIRCUIT
ZILG060	07/656,419	5,109,163	BOUBEKEUR BEN-HAMIDA	2/15/1991	4/28/1992	patented	TECHNIQUE FOR AUTOMATICALLY ADAPTING A PERIPHERAL INTEGRATED CIRCUIT FOR OPERATION WITH A VARIETY OF MICROPROCESSORS
ZILG-590C	08/248,468	5,495,594	CRAIG A. MACKENNA	5/24/1994	2/27/1996	patented	SEMICONDUCTOR MULTI-DEVICE SYSTEM WITH LOGIC MEANS FOR CONTROLLING THE OPERATIONAL MODE OF A SET OF MICROPROCESSORS
ZILG057	07/602,502	5,287,464	NIRAJ KUMAR	10/24/1990	2/15/1994	patented	CIRCUIT FOR GENERATING A MODE CONTROL SIGNAL
ZILG056C	08/098,750	5,363,383	HANUMANTHRAO NIKSHAK	7/29/1993	11/8/1994	patented	PROGRAMMABLE WAIT STATES GENERATOR FOR A MICROPROCESSOR AND COMPUTER SYSTEM UTILIZING IT
ZILG054C	08/034,510	5,313,621	STEPHEN H. CHAN	3/22/1993	5/17/1994	patented	IC CHIP HAVING VOLATILE MEMORY CELLS SIMULTANEOUSLY LOADED WITH INITIALIZATION DATA FROM UNIQUELY ASSOCIATED NON-VOLATILE READ-ONLY MEMORY RESPONSIVE TO A SINGLE INITIALIZATION INSTRUCTION FOR LOADING INITIAL BITS IN A PREDETERMINED ORDER
ZILG053	07/520,777	5,230,058	NIRAJ KUMAR	6/27/1990	7/22/1993	patented	NON-VOLATILE READ-ONLY MEMORY RESPONSIVE TO A SINGLE INITIALIZATION INSTRUCTION FOR LOADING INITIAL BITS IN A PREDETERMINED ORDER
ZILG048	07/544,520	5,222,218	DON SMITH	12/5/1989	12/29/1992	patented	CONTROL CIRCUIT HAVING OUTPUTS WITH DIFFERING RISE AND FALL TIMES
ZILG047	07/445,158	5,175,631	NIRAJ KUMAR	10/8/1992	8/24/1993	patented	CONTROL CIRCUIT HAVING OUTPUTS WITH DIFFERING RISE AND FALL TIMES
ZILG045	07/479,865	5,187,686	JOHN TRAN	2/14/1990	2/16/1993	patented	MERGING INTEGRATED CIRCUIT MASK DATABASES FORMED BY DIFFERENT DESIGN RULES THROUGH GLOBAL MASK DATA
ZILG043C	08/047,162	5,784,292	NIRAJ KUMAR	4/14/1993	7/21/1998	patented	TECHNIQUE FOR MODIFYING AN INTEGRATED CIRCUIT LAYOUT
ZILG042	07/420,912	5,231,580	NIRAJ KUMAR	10/13/1989	7/27/1993	patented	SYSTEM FOR THE AUTOMATIC TRANSMISSION OF MESSAGE STATUS IN DIGITAL DATA COMMUNICATION
ZILG035C2	08/214,019	5,625,842	MONTÉ J. DALRYMPLE	3/15/1994	4/29/1997	patented	DEVICE AND METHOD FOR PROGRAMMING CRITICAL HARDWARE PARAMETERS
ZILG031C	07/742,152	5,193,199	MONTÉ J. DALRYMPLE	8/1/1991	3/9/1993	patented	DEVICE AND METHOD FOR PROGRAMMING CRITICAL HARDWARE PARAMETERS

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