

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3358748

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:	5335249
Patent Number:	7212749
Patent Number:	6915083
Patent Number:	6317235
Patent Number:	7123840
Patent Number:	6590682
Patent Number:	6449075
Patent Number:	7702244
Patent Number:	7181144
Patent Number:	6642112

CORRESPONDENCE DATA

Fax Number: (925)835-5804

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: 9255505067

Email: darien@imperiumpw.com

Correspondent Name: IMPERIUM PATENT WORKS

Address Line 1: P.O. BOX 607

Address Line 2: DARIEN K. WALLACE

Address Line 4: PLEASANTON, CALIFORNIA 94566

PATENT

ATTORNEY DOCKET NUMBER:	IXYS CH TO IXYS CAYMAN11
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

REEL: 035665 FRAME: 0812

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: Uzi Sasson

Position: Director

Witness

Signature: 

Name: Ramon Lopez

Address: 1570 Buckeye Dr.
Milpitas, CA 95035

SIGNED for and on behalf of)
the ASSIGNEE)

Signature: 

Name: ARON P. AEBLYKWI

Position: DIRECTOR

Witness

Signature: 

Name: Ashijeet Deodhar

Address: 1590 Buckeye Dr
Milpitas CA 95035

Docket	Serial No.	Patent No.	Inventors	Filed	Issued	Status	Title
ZIL-848	12590,084	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	13255,420	8,188,686	Steven M. Pope	1/20/2012	5/29/2012	patented	System and Method for Processing and Forwarding Transmitted Information
ZIL-847	12158,710	8,184,574	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	12158,706	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	12158,716	8,653,935	Kamrajpati et al.	10/3/2009	pending	pending	Dimming a Multi-Lamp Fluorescent Light Fixture By Turning Off an Individual Lamp Using a Wireless Fluorescent Lamp Starter
ZIL-844	12158,713	8,653,935	Kamrajpati et al.	10/3/2009	pending	pending	Turning Off Multiple Fluorescent Lamps Using RF-Enabled Lamp Starter Units
ZIL-843	12158,712	8,653,935	Saab et al.	10/12/2009	pending	pending	Registering a Replaceable RF-Enabled Fluorescent Lamp Starter Unit to a Master Unit
ZIL-840	12158,707	8,587,415	Christopher W. Followell	03/26/2009	1/17/2012	patented	Receiving an IR Control Signal Through a Fresnel Lens of a Motion Sensor
ZIL-829	12229,574	8,165,832	Low et al.	11/12/2008	4/24/2012	patented	Wall Plug Power Monitor
ZIL-802	12296,562	8,754,584	Lloyd et al.	9/30/2008	1/26/2011	patented	Pulse Matching Delay-Locked Loop
ZIL-790	12319,775	8,074,033	Gyle D. Yearsley	11/12/2009	8/7/2011	patented	Cooperating Memory Controllers that Share Data Bus Terminals for Accessing Wide External Devices
ZIL-780-1C	13317,674	8,244,994	Gyle D. Yearsley	10/25/2011	8/7/2012	patented	Cooperating Memory Controllers that Share Data Bus Terminals for Accessing Wide External Devices
ZIL-778	12229,574	8,244,994	Roberts et al.	8/22/2008	pending	pending	Bit-Flipping Memory Controller to Prevent Data Remanence
ZIL-773	12154,611	7,675,447	David S. Coulson	5/24/2008	3/9/2010	patented	Low-Cost and Noise-insensitive Motion Detector
ZIL-772	12221,161	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	13482,891	8,356,759	Hoang Minh Phai	5/29/2012	1/22/2013	patented	Low-Cost Magnetic Stripe Reader Using Independent Switching Thresholds
ZIL-764	12214,479	7,563,494	Stortini et al.	3/23/2010	3/23/2010	patented	Press-Fit Integrated Circuit Package Involving Compressed Spring Contact Beams
ZIL-744	11904,749	7,998,090	David D. Eaton	9/28/2007	2/8/2011	patented	Press-Fit Integrated Circuit Package Involving Compressed Spring Contact Beams
ZIL-725	11796,844	7,525,828	Joshua J. Nefti	4/27/2007	2/21/2011	patented	General Purpose Ball Grid Array Security Cap
ZIL-725-1C	12386,590	7,993,748	Joshua J. Nefti	1/31/2007	1/21/2010	patented	General Purpose Ball Grid Array Security Cap
ZIL-678	11707,137	7,952,099	Paul G. Clark	11/27/2010	11/15/2011	patented	Switch-Free Clock Multiplexer That Provides an Output Clock Signal Based on Edge Deflection
ZIL-678-1C	12927,843	8,068,893	Paul G. Clark	11/17/2006	8/19/2008	patented	Switch-Free Clock Multiplexer That Provides an Output Clock Signal Based on Edge Deflection
ZIL-662	11160,1003	7,414,553	Anatoliy V. Tsyrganovich	2/18/2011	6/8/2010	patented	Frequency Trimming for Internal Oscillator for Test-Time Reduction
ZIL-662-1C	12228,824	7,733,250	Anatoliy V. Tsyrganovich	8/15/2008	6/8/2010	patented	Microcontroller Having In-Situ Autocalibrated Integrating Analog-to-Digital Converter
ZIL-654	11179,037	8,259,562	David R. Staab	6/30/2006	9/18/2012	patented	Open-Loop Transimpedance Amplifier for Infrared Diodes
ZIL-654-1C	13572,688	8,334,724	David R. Staab	1/17/2012	1/21/2013	patented	Open-Loop Transimpedance Amplifier for Infrared Diodes
ZIL-649	11345,803	8,606,183	Gyle D. Yearsley	2/1/2005	8/12/2014	patented	Blank Bit And Processor Instructions Employing The Blank Bit
ZIL-649-1C	14248,283	8,606,183	Gyle D. Yearsley	4/8/2014	pending	pending	Blank Bit And Processor Instructions Employing The Blank Bit
ZIL-646	11039,233	7,688,307	Anatoliy V. Tsyrganovich	1/24/2006	3/30/2010	patented	Determining the Distance an Object Has Moved Using an Accelerometer
ZIL-642	11406,059	7,450,966	Hidetsumi Hatton	4/18/2006	12/2/2008	patented	Microcontroller That Maintains Capacitors Of An Analog Circuit in A Charged State During Low Power Operation
ZIL-639	11771,453	8,051,235	Steven K. Fong	11/1/2006	1/11/2011	patented	Conditional Back-to-back Interrupt Vectoring
ZIL-631	11495,477	7,411,427	Steven K. Fong	7/28/2006	8/7/2008	patented	Clock Input Filter Circuit
ZIL-631-1C	12221,783	7,592,843	Steven K. Fong	8/5/2008	9/22/2009	patented	Clock Input Filter Circuit
ZIL-631-2C	12564,803	7,766,319	Steven K. Fong	9/1/2009	9/3/2010	patented	Clock Input Filter Circuit
ZIL-631-3C	12603,907	7,928,772	Steven K. Fong	7/9/2010	4/19/2011	patented	Clock Input Filter Circuit
ZIL-628	11378,785	7,362,255	Anatoliy V. Tsyrganovich	3/18/2006	4/22/2008	patented	Chopping And Oversampling ADC Having Reduced Low Frequency Drift
ZIL-628-1C	12148,715	7,551,110	Anatoliy V. Tsyrganovich	4/27/2008	6/23/2009	patented	Chopping And Oversampling ADC Having Reduced Low Frequency Drift
ZIL-627	11118,680	7,508,038	Ransom et al.	4/29/2005	3/24/2009	patented	ESD Protection Transistor
ZIL-627-1C	12383,534	7,807,528	Ransom et al.	3/24/2009	10/5/2010	patented	ESD Protection Transistor
ZIL-627-2C	12607,669	7,927,944	Ransom et al.	9/10/2010	4/19/2011	patented	ESD Protection Transistor
ZIL-627-3C	13065,940	8,062,941	Ransom et al.	4/2/2011	11/20/2011	patented	ESD Protection Transistor
ZIL-627-4C	13246,520	8,093,121	Ransom et al.	9/29/2011	1/10/2012	patented	ESD Protection Transistor
ZIL-611	11512,295	7,414,554	Anatoliy V. Tsyrganovich	8/29/2006	8/19/2008	patented	Linearity Correction For Analog-To-Digital Converters
ZIL-609	11265,421	7,415,559	Thomas Henry Hildebrandt	11/1/2005	8/19/2008	patented	Operation and Operand Inference for Extended-Precision Computation
ZIL-609-1C	12328,223	7,631,166	Thomas Henry Hildebrandt	6/11/2008	12/8/2009	patented	Operation and Operand Inference for Extended-Precision Computation
ZIL-609-4C	12590,070	7,631,166	Thomas Henry Hildebrandt	11/2/2008	12/12/2006	patented	Operation and Operand Inference for Extended-Precision Computation
ZIL-607	11008,1292	7,148,672	Steven L. Holmes	3/16/2005	10/4/2011	patented	Low-Voltage Bandgap Reference Circuit With Startup Control
ZIL-602	11498,873	8,033,867	Rex L. Allison	7/29/2006	1/22/2013	patented	Sample and Hold Time Stamp for Sensing Zero Crossing of Back Electromotive Force in 3-Phase Brushless DC Motors
ZIL-602-1C	13134,141	8,359,093	Rex L. Allison	5/3/2011	1/22/2013	patented	Sample and Hold Time Stamp for Sensing Zero Crossing of Back Electromotive Force in 3-Phase Brushless DC Motors
ZIL-602-2C	13740,066	8,647,531	Rex L. Allison	1/11/2013	9/30/2014	patented	Sample and Hold Time Stamp for Sensing Zero Crossing of Back Electromotive Force in 3-Phase Brushless DC Motors
ZIL-597	11448,514	7,725,769	David R. Staab	6/7/2006	5/25/2010	patented	Latent VBO Reset Circuit
ZIL-596	11026,750	7,102,452	Steven L. Holmes	12/12/2004	9/5/2006	patented	Temperature-Compensated RC Oscillator
ZIL-596-1P	11200,329	7,176,765	Shorb et al.	8/9/2005	2/13/2007	patented	Programmable Temperature-Compensated RC Oscillator
ZIL-591	11437,884	8,543,062	Daniel Saifu Moi	5/19/2006	9/24/2013	patented	Controlling Transmission Power in an kDAIRC Transmitter Circuit
ZIL-591-1C	13975,299	8,543,062	Daniel Saifu Moi	8/27/2004	5/1/2007	patented	Below-Ground Sensor Interface Amplifier
ZIL-589	10528,492	7,212,042	Hoang Minh Phai	8/27/2004	10/28/2008	patented	kDAIRC Transmitter Circuit Having Low Energy Consumption
ZIL-587	10596,506	7,444,090	Grace et al.	11/22/2004	1/6/2009	patented	Recovering Energy From An kDAIRC Remote Control Transmitter Circuit
ZIL-586	10887,290	7,474,857	Alan Grace	7/21/2004	1/6/2009	patented	Recovering Energy From An kDAIRC Remote Control Transmitter Circuit

Patent No.	Inventor	Date	Status	Abstract
ZIL-585-1C	Alan Grace	12/11/2008	patented	Recovering Energy From An IrDA/Remote Control Transmitter Circuit
ZIL-586-2C	Alan Grace	10/27/2013	patented	Single-Pin Serial Communication Link With Start-Bit Flow Control
ZIL-584-1D	Joshua J. Neke	5/21/2004	patented	Flow Control By Supplying A Remote Start Bit Onto A Single-wire Bus
ZIL-584-2D	Joshua J. Neke	8/11/2009	patented	Flow Control By Supplying A Remote Start Bit Onto A Single-wire Bus
ZIL-584-2D-1C	Joshua J. Neke	8/15/2007	patented	Adaptive Error Correction in an Oversampled ADC
ZIL-579	Anatoliy V. Tsyganzovich	5/12/2006	patented	Adaptive Error Correction in an Oversampled ADC
ZIL-579-1C	Anatoliy V. Tsyganzovich	11/4/2005	patented	Error Correction in an Oversampled ADC Using Few Stored Calibration Coefficients
ZIL-579-1C-1P	Anatoliy V. Tsyganzovich	3/24/2009	patented	IrDA Transceiver Module That Also Functions As Remote Control IR Transmitter
ZIL-576	Alan Grace	5/4/2010	patented	IrDA Transceiver Module That Also Functions As Remote Control IR Transmitter
ZIL-576-1C	Alan Grace	6/14/2011	patented	IrDA Transceiver Module That Also Functions As Remote Control IR Transmitter
ZIL-576-2C	Alan Grace	10/23/2007	patented	Generating a Mark-Space Table And A String Of Timing Information On A Remote Control Device
ZIL-570-2D	Provis et al.	3/4/2008	patented	Interpreting A Script To Generate An Operational Signal On A Remote Control Device
ZIL-570-3D	Provis et al.	6/5/2007	patented	Interpreting A Common Script Block To Output Various Forms Of Data According To A Common Protocol
ZIL-570-4D	Provis et al.	4/22/2008	patented	Loading A Machine Code API Onto An 8-Bit Virtual Machine To Enable New Functionality
ZIL-570-1C-2C	Provis et al.	2/10/2015	patented	Loading A Machine Code API Onto An 8-Bit Virtual Machine To Enable New Functionality
ZIL-570-6D	Provis et al.	6/12/2007	patented	Loading A Machine Code API Onto An 8-Bit Virtual Machine To Enable New Functionality
ZIL-570-7D	Provis et al.	10/14/2008	patented	Loading A Machine Code API Onto An 8-Bit Virtual Machine To Enable New Functionality
ZIL-584	Hide Hattori	3/18/2008	patented	A Compact Register-Based Virtual Machine And Its Use On Resource-Constrained Devices
ZIL-584-1C	Hide Hattori	8/22/2010	patented	Spread Spectrum Clock Generator with Controlled Delay Elements
ZIL-584-2C	Hide Hattori	11/27/2012	patented	Spread Spectrum Clock Generator with Controlled Delay Elements
ZIL-583	Thornley et al.	10/11/2005	patented	Circuit For Deflection Of Hardware Faults Due To Temporary Power Supply Fluctuations
ZIL-583-1P	Fritz et al.	11/13/2007	patented	Hardware Debug Device Having Script-Based Host Interface
ZIL-548-1P	Anatoliy V. Tsyganzovich	3/23/2005	patented	Calibrating An Analog-to-Digital Converter Using a Test Signal with a Precise dc Voltage
ZIL-548	Anatoliy V. Tsyganzovich	3/14/2008	patented	Self-Calibrating Sigma-Delta Analog-to-Digital Converter
ZIL-543-1P	Anatoliy V. Tsyganzovich	8/11/2005	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	Yearsley et al.	3/4/2008	patented	Auto Baud System And Method And Single Pin Communication Interface
ZIL-543	Anatoliy V. Tsyganzovich	10/31/2002	patented	Auto Baud System And Method And Single Pin Communication Interface
ZIL-537-1P	Anatoliy V. Tsyganzovich	6/27/2006	patented	ADC With Reduced Quantization Noise and Programmable Bit Resolution
ZIL-537	Anatoliy V. Tsyganzovich	1/4/2005	patented	ADC With Reduced Quantization Noise and Programmable Bit Resolution
ZIL-528	Watson et al.	9/28/2001	patented	Sigma-Delta Analog-to-Digital Converter With Reduced Quantization Noise
ZIL-524-1C	Jeffrey R. Dorst	4/1/2008	patented	Optics System For Infrared Signal Transceivers
ZIL-524	Jeffrey R. Dorst	9/6/2005	patented	A Dedicated Command Port For Memory Controllers
ZIL-523	Cytle D. Yearsley	7/5/2005	patented	Apparatus And Methods For Dedicated Command Port in Memory Controllers
ZIL-522	Anatoliy V. Tsyganzovich	1/6/2004	patented	Context Switching Pipelined Microprocessor
ZIL-521-1P	Anatoliy V. Tsyganzovich	8/15/2006	patented	Scan Velocity Modulation Technique
ZIL-521	Anatoliy V. Tsyganzovich	2/21/2006	patented	Modifying Ramp Angle in a Digital Frequency Locked Loop
ZIL-520	Anatoliy V. Tsyganzovich	10/21/2003	patented	Frequency Locked Loop
ZIL-519-1C-1P	Anatoliy V. Tsyganzovich	2/18/2003	patented	Circuit and Method That Allows the Amplitudes of Vertical Correction Signal Components to be Adjusted
ZIL-519-1C	Anatoliy V. Tsyganzovich	8/30/2010	patented	Circuit and Method for Reducing East-West Geometry Mismatch Between the Top and Bottom of a Raster Display
ZIL-519	Anatoliy V. Tsyganzovich	4/5/2004	patented	Circuit and Method for Reducing East-West Geometry Mismatch Between the Top and Bottom of a Raster Display
ZIL-511	Bruce Troutman	10/31/2001	patented	Digital-To-Analog Converters With Reduced Parasitics and Associated Methods
ZIL-514	Alivis et al.	3/28/2003	patented	Method and System for Electronic Data Sales and Distribution Over Wide Area Computer Networks
ZIL-506	DAVID CARROLL FRITZ	9/5/2000	patented	Method for the Generation of ISA Simulators and Assemblers from a Machine Language
ZIL-505	JOSEPH S. KRUEGER	2/10/1994	patented	Method and Apparatus for Communicating with a Product Label
ZIL-504	THOMAS E. KRUEGER	11/13/2001	patented	Method and Apparatus for Providing Information Concerning Products Using Radio Frequency Transmissions
ZIL-500	THOMAS E. KRUEGER	7/29/1993	patented	METHOD AND APPARATUS FOR SPREAD SPECTRUM COMMUNICATIONS
ZIL-500-1C	Hamilton et al.	5/12/2007	patented	Signal Receiver Having Wide Band Amplification Capability
ZIL-306	Hamilton et al.	7/5/2005	patented	Signal Receiver Having Wide Band Amplification Capability
ZIL-305	ALLAN HAMILTON	11/13/2001	patented	Method and System for Preventing Burn-out of Infrared Transmitter Diodes
ZIL-303-1C	Allan Hamilton	10/17/2006	patented	Infrared Signal Communication System and Method Including Transmission Means Having Automatic Gain Control
ZIL-303	Allan Hamilton	7/8/2003	patented	Infrared Signal Communication System and Method Including Transmission Means Having Automatic Gain Control
ZIL-302	Watson et al.	4/30/2001	patented	Circuit Design and Optics System for Infrared Signal Transceivers
ZIL-300-1P-2C	Hamilton et al.	2/20/2007	patented	Improved Circuit Design and Optics System for Infrared Signal Transceivers
ZIL-300-1P-1C	Hamilton et al.	1/14/2003	patented	Non-Oxidizing Spacer Denatification Method for Manufacturing Semiconductor Devices
ZIL-518	Lowe et al.	5/22/2007	patented	System and Method for Providing an Improved Standby Mode for Infrared Data Transceivers
ZIL-244	Allan Hamilton	11/29/2005	patented	Architecture to Relax Memory Performance Requirements
ZIL-244	James W. Leib	1/22/2002	patented	Auto-Zero Feedback Sample-and-Hold System
ZIL-235	James W. Leib	1/15/2002	patented	Circuit for Automatically Having Mechanical Device at Its Resonance Frequency
ZIL-232	Troy N. Gilliland	7/3/2000	patented	Switch Amplifier Circuit

PATENT

REEL: 035665 FRAME: 0815

CMOS Switch circuit Having Concurrently Switching Complementary Outputs Independently From Process Variations
 Using a Reduced Memory Lookup Table for Gamma Correction Through Interpolation
 Current Regulator with Low Voltage Detection Capability
 Non-Volatile Memory Program Driver and Read Reference Circuits
 Method and Apparatus for an Enhanced Processor
 Memory Mapped Programmable Generator Outputting Series of Events with Timing Derived from Event Block
 Low Ripple Power Distribution System
 Method and Apparatus for Improved Signal Restoration
 Method of Forming Semiconductor Memory Device with LDD
 Method and Apparatus for Improved Signal Filtering
 Data Flow Enhancement for Processor Architectures with Cache
 Process To Improve High-Performance Capacitors in Integrated MOS Technologies
 Process To Improve High-Performance Capacitors in Integrated MOS Technologies
 Process To Improve High-Performance Capacitors in Integrated MOS Technologies
 Phase and Frequency Locked Clock Generator
 High Voltage PMOS Level Shifter
 Method of Eliminating Gate Leakage in Nitrogen Annealed Oxides
 High Aspect Ratio Photolithographic Method for High Energy Implantation
 Externally Synchronized Voltage Controlled Oscillator in Phase Locked Loop
 Low Voltage Charge Pump Circuit
 Method of Fabricating a High Quality Thin Oxide
 Dot-Crawl Reduction in NTSC/PAL Graphic Encoder
 Circle Correction in Digital Low-Pass Filter
 Reduction of Color Transition Distortions in NTSC/PAL Encoder
 Reconfigurable Infinite Impulse Response Digital Filter
 Integrated Television Processor
 Method of Fabricating a MOS Device
 Method of Fabricating a MOS Device
 Layout Solution for Electromagnetic Interference Reduction
 Light Phase Grating Device
 In-Circuit Emulation System with Minimal Impact on Target Environment
 Flexible Interrupt System for an Integrated Circuit
 I/O Port and RAM Memory Addressing Technique
 Apparatus and Method for Digital Amplitude and Phase Detection
 Apparatus and Method for Data Synchronizing and Tracking
 Apparatus and Method for Data Synchronizing and Tracking
 Asynchronous Analog or Digital Frequency Measurement on Digital Test Equipment
 Method of Making MOS Precision Capacitor with Low Voltage Coefficient
 MOS Precision Capacitor with Low Voltage Coefficient
 Dual Latch Data Transfer Pacing Logic Using a Timer to Maintain a Data Transfer Interval
 Circuit for Sensing Whether or not an Add-In Board is Inserted into a Bus Connector of a Mother Board
 Efficient Functional Test Scheme Incorporated in a Programmable Duration Binary Counter
 Method of Demodulating Chirp Spread Spectrum
 Flash Analog-to-Digital Converter
 Frequency Multiplying Clock Signal Generator
 Technique for Generating On-Screen Display Characters Using Software Implementation
 Technique for Generating On-Screen Display Characters Using Software Implementation
 Circuit for Automatically Detecting Off-Chip, Crystal or On-Chip, RC Oscillator Option
 Method of Fabricating High Threshold Metal Oxide Silicon Read-Only-Memory Transistors
 High-Threshold Metal Oxide Silicon Read-Only-Memory Transistors
 TECHNIQUE FOR ELIMINATING DATA TRANSMIT MEMORY UNDERFLANS
 ANALOG WAVELET TRANSFORM CIRCUITRY
 TECHNIQUE FOR ACCESSING AND REFRESHING MEMORY LOCATIONS WITHIN ELECTRONIC STORAGE DEVICES WHICH NEED EFFICIENT PSEUDORANDOM VALUE GENERATOR
 METHOD OF ELIMINATING METAL VOIDING IN A TITANIUM NITRIDE/ALUMINUM PROCESSING
 ELECTROSTATIC DISCHARGE PROTECTION FOR METAL-OXIDE-SILICON FEEDBACK ELEMENTS BETWEEN PINS
 DELAYED FIFO STATUS FOR SERIAL SHIFT EMULATION
 FAST INSTRUCTION DECODING IN A PIPELINE PROCESSOR
 TECHNIQUE FOR ACCELERATING INSTRUCTION DECODING OF INSTRUCTION SETS WITH VARIABLE LENGTH OPERANDS IN A SELF ARBITRATING AUTO RESETTABLE FLAG CIRCUIT
 TITANIUM CONTACT METALLIZATION
 TITANIUM CONTACT METALLIZATION
 DECODER CIRCUIT WITH BYPASS CIRCUITRY AND REDUCED INPUT CAPACITANCE FOR GREATER SPEED

08/15/90	5,304,111	Mohammad R. Pijabeni	5/12/2000	10/16/2000	patented
08/15/90	5,303,876	Mohammad R. Pijabeni	2/16/2000	12/21/2000	patented
09/16/90	5,359,442	MHAI MAING ESCU	12/13/1999	3/19/2002	patented
09/16/90	5,319,279	MHAI MAING ESCU	10/29/1999	4/17/2001	patented
09/16/90	5,302,257	CRAIG MACKENNA	9/17/1999	12/31/2002	patented
09/16/90	5,354,334	Dennis G. Zaffiro	8/13/1999	1/28/2000	patented
09/16/90	5,154,066	MHAI C. MANOLESCU	3/29/2000	3/4/2003	patented
09/16/90	5,329,246	Anatoly V. Tsyrganovich	7/16/1999	1/17/2001	patented
09/16/90	5,323,091	SUNGKWON LEE	7/22/1999	7/23/2002	patented
09/16/90	5,324,384	ANATOLY V. TSYRGANOVIC	11/23/1999	6/3/2003	patented
09/16/90	5,374,682	STEPHEN H. CHAN	7/12/1999	5/13/2005	patented
09/16/90	7,060,584	Cams et al.	11/29/2005	8/3/2010	patented
09/16/90	7,768,052	Cams et al.	12/29/2010	9/13/2011	patented
09/16/90	8,017,475	Cams et al.	5/31/2011	12/4/2012	patented
09/16/90	13,134,159	Cams et al.	2/10/1999	12/26/2000	patented
09/16/90	5,166,606	ANATOLY V. TSYRGANOVIC	2/19/1999	10/9/2001	patented
09/16/90	6,300,795	BRUCE LEE TROUTMAN	3/21/1999	12/26/2000	patented
09/16/90	6,165,846	TIMOTHY K. CARNS	7/11/1999	8/10/2003	patented
09/16/90	5,576,405	STEPHAN J. BLUFFAT	10/15/1997	1/25/2000	patented
09/16/90	6,018,273	ANATOLY V. TSYRGANOVIC	12/18/1997	8/17/1999	patented
09/16/90	5,940,264	Bruce Lee Troutman	12/18/1998	2/20/2001	patented
09/16/90	6,190,873	JOHN E. BERG	9/29/1997	12/19/2000	patented
09/16/90	6,163,346	ANATOLY V. TSYRGANOVIC	9/29/1997	11/21/2006	patented
09/16/90	7,138,037	Anatoly V. Tsyrganovich	9/29/1997	11/21/2006	patented
09/16/90	5,995,164	ANATOLY V. TSYRGANOVIC	9/29/1997	1/30/1999	patented
09/16/90	6,009,445	ANATOLY V. TSYRGANOVIC	10/15/1997	12/28/1999	patented
09/16/90	6,002,449	Anatoly V. Tsyrganovich	10/15/1997	12/14/1999	patented
09/16/90	6,436,195	Smythe et al.	8/22/2000	8/20/2002	patented
09/16/90	6,155,853	Smythe et al.	1/13/1997	12/5/2000	patented
09/16/90	5,969,390	BRUNO KRANZEN	5/23/1998	10/19/1999	patented
09/16/90	5,378,127	JOHN E. BERG	9/9/1997	11/21/1999	patented
09/16/90	5,960,190	CRAIG MACKENNA	2/12/1997	9/26/1999	patented
09/16/90	5,860,013	Stephen H. Chan	7/25/1996	1/12/1999	patented
09/16/90	5,925,848	OSCAR AYZENBERG	8/22/1996	7/20/1999	patented
09/16/90	5,785,865	OSCAR AYZENBERG	6/28/1996	6/28/1998	patented
09/16/90	5,349,122	GILBERT R. WOODMAN, JR.	12/21/1993	2/19/2002	patented
09/16/90	6,064,767	GILBERT R. WOODMAN, JR.	12/20/1996	5/16/2000	patented
09/16/90	6,099,161	IGOR FURLAN	12/22/1995	8/6/2000	patented
09/16/90	5,750,426	KAMAL RAJAKANAN	10/24/1996	5/12/1998	patented
09/16/90	5,408,258	KAMAL RAJAKANAN	3/18/1995	3/4/1997	patented
09/16/90	5,999,742	GRANT B. RICHARDS	1/26/1995	12/7/1998	patented
09/16/90	5,812,634	CRAIG MACKENNA	9/28/1994	3/18/1997	patented
09/16/90	5,381,453	STEPHEN H. CHAN	2/9/1994	1/19/1995	patented
09/16/90	5,748,670	LYN R. ZASTROW	5/25/1995	5/5/1998	patented
09/16/90	5,528,242	NIRAJ KUMAR	8/9/1994	6/18/1996	patented
09/16/90	5,479,125	JOHN TRAN	5/25/1994	12/26/1995	patented
09/16/90	6,072,462	ALEXSANDR MOVSOVICH	7/30/1996	6/6/2000	patented
09/16/90	5,608,425	ALEXSANDR MOVSOVICH	3/21/1995	3/4/1997	patented
09/16/90	5,369,577	BOUBEKUR BEHAMDIA	10/13/1993	1/12/1994	patented
09/16/90	5,389,565	ALEX GYURE	1/7/1994	2/12/1995	patented
09/16/90	5,456,896	ALEX GYURE	10/7/1994	2/12/1995	patented
09/16/90	5,602,537	MOHTE J. DALRYMPLE	3/29/1996	2/11/1997	patented
09/16/90	5,485,654	R. TIMOTHY EDWARDS	1/6/1993	2/27/1996	patented
09/16/90	5,337,564	ASHER HAZANCHUK	3/6/1993	7/16/1995	patented
09/16/90	5,428,561	DAVID FRYANT	4/27/1993	6/27/1995	patented
09/16/90	5,338,423	GREGORY HINDMAN	11/6/1992	8/16/1994	patented
09/16/90	5,579,200	KAMAL RAJAKANAN	3/24/1995	1/26/1996	patented
09/16/90	5,619,681	BOUBEKUR BEHAMDIA	6/30/1993	3/31/1998	patented
09/16/90	5,734,854	STEPHEN H. CHAN	1/6/1997	10/1/1997	patented
09/16/90	5,592,635	STEPHEN H. CHAN	5/14/1994	5/24/1994	patented
09/16/90	5,317,187	GREGORY HINDMAN	5/4/1992	5/31/1994	patented
09/16/90	5,240,880	GREGORY HINDMAN	5/6/1992	8/31/1993	patented
09/16/90	5,262,887	BOUBEKUR BEHAMDIA	3/9/1992	1/15/1993	patented

PATENT

REEL: 035665 FRAME: 0816

ZILG083	07/677,871	5,244,831	GREGORY HINDMAN	5/11/1992	9/14/1993	patented	METHOD OF DOPING A POLYSILOXON LAYER ON A SEMICONDUCTOR WAFER
ZILG080	07/665,246	5,442,736	LYN R. ZAISTROW	3/23/1992	8/15/1993	patented	PULSE GENERATOR AND DEMODULATOR WITH CONTROLLING PROCESSOR AND DECREMENTING COUNTERS
ZILG079C	08/094,350	5,293,562	STEVEN M. POPE	6/28/1993	3/10/1994	patented	DEVICE WITH MULTIPLEXED AND NON-MULTIPLEXED ADDRESS AND DATA I/O CAPABILITY
ZILG079	07/797,111	5,262,991	STEVEN M. POPE	1/22/1991	11/16/1993	patented	DEVICE WITH MULTIPLEXED AND NON-MULTIPLEXED ADDRESS AND DATA I/O CAPABILITY
ZILG076	07/953,732	5,319,753	CRAIG A. MACKENNA	9/29/1992	6/7/1994	patented	QUEUED INTERRUPT MECHANISM WITH SUPPLEMENTARY COMMAND/STATUS MESSAGE INFORMATION
ZILG075C	08/487,711	5,659,688	HANUMANTHRAO NIMSHAK,	5/7/1995	8/19/1997	patented	TECHNIQUE AND CIRCUIT FOR PROVIDING TWO OR MORE PROCESSORS WITH TIME MULTIPLEXED ACCESS TO A SHARED
ZILG075	07/991,889	5,471,588	HANUMANTHRAO NIMSHAK,	11/25/1992	11/28/1995	patented	TECHNIQUE AND CIRCUIT FOR PROVIDING TWO OR MORE PROCESSORS WITH TIME MULTIPLEXED ACCESS TO A SHARED
ZILG074	07/816,909	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	5,426,252	ANDRE B. WALKER	1/31/1992	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	11/23/1993	patented	COMPUTER SYSTEM PERIPHERAL CONNECTION PULSE FILTERING TECHNIQUE AND CIRCUIT
ZILG070	07/855,526	5,478,746	MONTÉ J. DALRYMPLE	3/23/1992	9/27/1995	patented	INTEGRATED MICROPROCESSOR UNIT GENERATING SEPARATE MEMORY AND INPUT-OUTPUT DEVICE CONTROL SIGNALS
ZILG068	07/735,403	5,145,715	BOUBEKUR BEKHAMBA	7/26/1991	9/8/1992	patented	DOMINO LOGIC DECODER
ZILG067	07/753,729	5,263,166	DIMITRIC, DESMONS	9/3/1991	11/16/1993	patented	TECHNIQUE OF PROGRAMMING INTEGRATED CIRCUIT CONTROL REGISTERS
ZILG064	07/661,298	5,345,564	BRADLEY D. JENSEN	3/31/1992	9/6/1994	patented	SERIAL COMMUNICATION PERIPHERAL INTEGRATED ELECTRONIC CIRCUIT THAT RECOGNIZES ITS UNIQUE ADDRESS BEFORE
ZILG063	07/686,244	5,278,957	STEPHEN H. CHAN	4/16/1991	1/11/1994	patented	DATA TRANSFER CIRCUIT FOR INTERFACING TWO BUS SYSTEMS THAT OPERATE ASYNCHRONOUSLY WITH RESPECT TO EACH
ZILG061	07/659,004	5,093,533	BOUBEKUR BEKHAMBA	2/20/1991	3/3/1992	patented	EXTERNALLY TRIMMED INTEGRATED CIRCUIT RC OSCILLATOR
ZILG060	07/656,419	5,109,163	BOUBEKUR BEKHAMBA	2/15/1991	4/28/1992	patented	INTEGRATED POWER-ON RESET CIRCUIT
ZILG-59C/P	08/248,468	5,495,594	CRAIG A. MACKENNA	5/24/1994	2/27/1996	patented	TECHNIQUE FOR AUTOMATICALLY ADAPTING A PERIPHERAL INTEGRATED CIRCUIT FOR OPERATION WITH A VARIETY OF MICRO
ZILG057	07/602,502	5,287,464	NIRAJ KUMAR	10/24/1990	2/15/1994	patented	SEMICONDUCTOR MULTIDevice SYSTEM WITH LOGIC MEANS FOR CONTROLLING THE OPERATIONAL MODE OF A SET OF MICRO
ZILG055C	08/098,750	5,363,383	HANUMANTHRAO NIMSHAK	7/29/1993	11/8/1994	patented	CIRCUIT FOR GENERATING A MODE CONTROL SIGNAL
ZILG054C	08/034,510	5,313,621	STEPHEN H. CHAN	3/22/1993	5/17/1994	patented	PROGRAMMABLE WAIT STATES GENERATOR FOR A MICROPROCESSOR AND COMPUTER SYSTEM UTILIZING IT
ZILG053	07/520,777	5,230,058	NIRAJ KUMAR	5/8/1990	7/20/1993	patented	IC CHIP HAVING VOLATILE MEMORY CELLS SIMULTANEOUSLY LOADED WITH INITIALIZATION DATA FROM UNIQUELY ASSOCIATED
ZILG048	07/544,520	5,222,218	DON SMITH	6/27/1990	6/22/1992	patented	SYSTEM WITH DEVICES CONNECTED IN SEQUENCE TO RECEIVE INFORMATION IN A PREDETERMINED ORDER
ZILG047	07/446,158	5,175,631	NIRAJ KUMAR	12/5/1989	12/29/1992	patented	NON-VOLATILE READ-ONLY MEMORY RESPONSIVE TO A SINGLE INITIALIZATION INSTRUCTION FOR LOADING INITIAL BITS IN
ZILG045D/V	07/959,507	5,239,237	JOHN TRAN	10/8/1992	8/24/1993	patented	CONTROL CIRCUIT HAVING OUTPUTS WITH DIFFERING RISE AND FALL
ZILG045	07/479,865	5,187,686	JOHN TRAN	2/14/1990	2/16/1993	patented	CONTROL CIRCUIT HAVING OUTPUTS WITH DIFFERING RISE AND FALL
ZILG043C	08/047,162	5,784,292	NIRAJ KUMAR	4/4/1993	7/21/1998	patented	MERGING INTEGRATED CIRCUIT MASK DATABASES FORMED BY DIFFERENT DESIGN RULES THROUGH GLOBAL MASK DATA
ZILG042	07/420,912	5,231,590	NIRAJ KUMAR	10/13/1989	7/27/1993	patented	TECHNIQUE FOR MODIFYING AN INTEGRATED CIRCUIT LAYOUT
ZILG035C2	08/214,019	5,625,842	MONTÉ J. DALRYMPLE	3/15/1994	4/29/1997	patented	SYSTEM FOR THE AUTOMATIC TRANSFER OF MESSAGE STATUS IN DIGITAL DATA COMMUNICATION
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