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TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 ETAS ID: TM330685

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	Notice of Substitution of Administrative Agent

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
Bank of America, N.A., as Resigning Administrative Agent		01/30/2015	National banking association: UNITED STATES

RECEIVING PARTY DATA

Name:	Silicon Valley Bank, as Successor Administrative Agent
Street Address:	2400 Hanover Street
City:	Palo Alto
State/Country:	CALIFORNIA
Postal Code:	94304
Entity Type:	Banking corporation: CALIFORNIA

PROPERTY NUMBERS Total: 43

Property Type	Number	Word Mark
Serial Number:	85756114	IXCLOUDPERF
Registration Number:	4298483	ANUE
Registration Number:	4298481	ANUE SYSTEMS
Registration Number:	4328597	Α
Registration Number:	4123421	NET TOOL OPTIMIZER
Registration Number:	3607653	BREAKINGPOINT
Registration Number:	4580904	XCELLON-MULTIS
Registration Number:	4151381	IMPAIRNET
Registration Number:	4085080	ENABLING A CONVERGED WORLD
Registration Number:	4119489	XDENSITY
Registration Number:	3966464	IXCATAPULT
Registration Number:	4088854	XCELLON-LAVA
Registration Number:	4091962	XCELLON
Registration Number:	4088784	XCELLON-FLEX
Registration Number:	4088785	XCELLON-ULTRA
Registration Number:	3826165	TESTTALK
Registration Number:	3278962	IXNETWORK
Registration Number:	3354915	IXLOAD
		TDADEMADIA

TRADEMARK

900314350 REEL: 005450 FRAME: 0750

Property Type	Number	Word Mark
Registration Number:	3828628	IXIA
Registration Number:	3397021	APTIXIA
Registration Number:	3489272	
Registration Number:	2974112	IXCHARIOT
Registration Number:	3068884	VERIWAVE
Registration Number:	3248026	REAL WORLD TRAFFIC
Registration Number:	3121098	IXPROFILE
Registration Number:	3743521	IXEDGE
Registration Number:	2654846	OPTIXIA
Registration Number:	2616682	IXIA
Registration Number:	2594810	QCHECK
Registration Number:	2571829	DCT2000
Registration Number:	2449799	MGTS
Registration Number:	2392826	IXEXPLORER
Registration Number:	2311797	
Registration Number:	2297537	CATAPULT COMMUNICATIONS
Registration Number:	1503690	CHAMELEON
Registration Number:	3116558	NET OPTICS
Registration Number:	3370247	ITAP
Registration Number:	3522436	REGENERATION TAP
Registration Number:	3119339	ACTIVE RESPONSE
Registration Number:	2619668	TAP INTO YOUR NETWORK
Registration Number:	2630027	BRIGHT IDEAS BUILT FOR SPEED
Registration Number:	2619669	NETOPTICS
Registration Number:	2616594	NETOPTICS

CORRESPONDENCE DATA

Fax Number: 2149813400

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: 214-981-3483
Email: dclark@sidley.com
Correspondent Name: Dusan Clark, Esq.
Address Line 1: Sidley Austin LLP

Address Line 2: 2001 Ross Avenue, Suite 3600

Address Line 4: Dallas, TEXAS 75201

ATTORNEY DOCKET NUMBER:	51285-32400
NAME OF SUBMITTER:	Dusan Clark
SIGNATURE:	/Dusan Clark/

DATE SIGNED: 02/02/2015 **Total Attachments: 24** source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page1.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page2.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page3.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page4.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page5.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page6.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page7.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page8.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page9.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page10.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page11.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page12.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page13.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page14.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page15.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page16.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page17.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page18.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page19.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page20.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page21.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page22.tif source=EXECUTED Ixia SVB - Notice of Substitution - Patents, Trademarks and Copyrights#page23.tif

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NOTICE OF SUBSTITUTION OF ADMINISTRATIVE AGENT IN PATENTS, TRADEMARKS AND COPYRIGHTS

This NOTICE OF SUBSTITUTION OF ADMINISTRATIVE AGENT IN PATENTS, TRADEMARKS AND COPYRIGHTS (this "Notice") is effective as of January 30, 2015, by and among (i) IXIA, a California corporation ("Ixia"), ANUE SYSTEMS, INC., a Delaware corporation ("Anue"), BREAKINGPOINT SYSTEMS, INC., a Delaware corporation ("BreakingPoint"), and NET OPTICS, INC., a Delaware corporation ("Net Optics" and with Ixia, Anue and BreakingPoint, the "Grantors"), (ii) BANK OF AMERICA, N.A., the resigning Administrative Agent, Swingline Lender and L/C Issuer (in such capacity, the "Resigning Agent") under the Credit Agreement and the Resignation and Appointment Agreement (as hereinafter defined), and (iii) SILICON VALLEY BANK, the successor administrative agent under the Credit Agreement, as hereinafter defined (in such capacity, together with its successors and assigns in such capacity, the "Successor Agent"). Capitalized terms used herein and not otherwise defined herein shall have the meanings assigned to such terms in the Credit Agreement.

RECITALS

WHEREAS, reference is made to the Credit Agreement, dated as of December 21, 2012, among Ixia, in its capacity as Borrower, the Guarantors party thereto, the Lenders party thereto, and the Resigning Agent, as the Administrative Agent (as amended, restated, supplemented, or otherwise modified, the "Credit Agreement");

WHEREAS, the Grantors, the other Loan Parties, the Lenders, the Resigning Agent, and the Successor Agent entered into that certain Resignation and Appointment Agreement, dated as of January 30, 2015 (as amended, restated, supplemented, or otherwise modified, the "Substitution Agreement"), pursuant to which the Resigning Agent resigned as the Administrative Agent under the Credit Agreement, and the Successor Agent was appointed as the Administrative Agent under the Credit Agreement;

WHEREAS, pursuant to the Substitution Agreement, the Resigning Agent assigned to the Successor Agent all of the rights and duties of the Resigning Agent under the Loan Documents, including, without limitation, that certain Security and Pledge Agreement, dated as of December 21, 2012 (as amended, restated, supplemented, or otherwise modified, the "**Agreement**"); and

WHEREAS, the Resigning Agent is executing this Notice for the purpose of providing notice of the transfer of the Resigning Agent's right, title, and interest in the Collateral (as defined in the Agreement) to the Successor Agent pursuant to the Substitution Agreement;

AGREEMENT

NOW, THEREFORE, the Resigning Agent hereby gives notice that it has transferred and conveyed to the Successor Agent, as set forth in the Substitution Agreement, all of the Resigning Agent's right, title, and interest in the Collateral related to the Patents described on **Schedule A**, the Copyrights described on **Schedule B**, and the Trademarks described on **Schedule C**.

- 1. Governing Law. THIS NOTICE SHALL BE CONSTRUED IN ACCORDANCE WITH, AND GOVERNED IN ALL RESPECTS BY, THE INTERNAL LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO ANY CONFLICTS OF LAW PROVISIONS THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANY OTHER JURISDICTION.
- 2. **Counterparts**. This Notice may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument. Delivery of an executed counterpart of a signature page to this Notice by facsimile or other electronic transmission shall be effective as delivery of a manually executed counterpart thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Notice as of the date first above written.

GRANTORS

IXIA

By:
Name: Ronald W. Buckly
Title: SVP, Corporate Attains

ANUE SYSTEMS, INC.

BREAKINGPOINT SYSTEMS, INC.

By: Name: Ronald W. Buckly
Title: SVP, Legal, and Socretary

NET OPTICS, INC.

Signature Page to Notice of Substitution of Administrative Agent in Patents, Trademarks and Copyrights

RESIGNING AGENT

BANK OF AMERICA, N.A.

Name: COREAT L.WALLAGE, JR. Title: SVA

SUCCESSOR AGENT

SILICON VALLEY BANK

By; Name: Title:

Signature Page to Notice of Substitution of Administrative Agent in Patents, Trademarks and Copyrights

RESIGNING AGENT

BANK OF AMERICA, N.A.

By:______ Name: Title:

SUCCESSOR AGENT

SILICON VALLEY BANK

By: And Modey

Name: Ross moder
Title: Vica Product

SCHEDULE A

Patents

PATENT NO./ PUBLICATION NO./ APPLICATION NO.	ISSUE DATE/ PUB. DATE/ FILING DATE	TITLE	CURRENT OWNER	STATUS
20130077642 13442262	28-MAR-2013 09-APR-2012	SYSTEMS AND METHODS UTILIZING RANDOMIZED CLOCK RATES TO REDUCE SYSTEMATIC TIME-STAMP GRANULARITY ERRORS IN NETWORK PACKET COMMUNICATIONS	ANUE SYSTEMS, INC.	PUBLISHED
20120207178 13352106	16-AUG-2012 17-JAN-2012	SYSTEMS AND METHODS UTILIZING LARGE PACKET SIZES TO REDUCE UNPREDICTABLE NETWORK DELAY VARIATIONS FOR TIMING PACKETS	ANUE SYSTEMS, INC.	PUBLISHED
8902895 13227617	02-DEC-2014 08-SEP-2011	AUTOMATIC FILTER OVERLAP PROCESSING AND RELATED SYSTEMS AND METHODS	ANUE SYSTEMS, INC.	PUBLISHED
8850259 12930490	30-SEP-2014 07-JAN-2011	SYSTEMS AND METHODS FOR PRECISE GENERATION OF PHASE VARIATION IN DIGITAL SIGNALS	ANUE SYSTEMS, INC.	ISSUED
8842672 13432172	23-SEP-2014 28-MAR-2012	SYSTEMS AND METHODS FOR MODIFYING NETWORK PACKETS TO USE UNRECOGNIZED HEADERS/FIELDS FOR PACKET CLASSIFICATION AND FORWARDING	ANUE SYSTEMS, INC.	ISSUED
8842548 13346123	23-SEP-2014 13-346-123	SUPERSET PACKET FORWARDING FOR OVERLAPPING FILTERS AND RELATED SYSTEMS AND METHODS	ANUE SYSTEMS, INC.	ISSUED
8788867 12930461	22-JUL-2014 07-JAN-2011	SYSTEMS AND METHODS FOR PLAYBACK DETECTED TIMING EVENTS	ANUE SYSTEMS, INC.	ISSUED
8750335 13505508	10-JUN-2014 02-MAY-2012	METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR MEASURING A COMMUNICATION FROM A FIRST DEVICE TO A SECOND DEVICE	ANUE SYSTEMS, INC.	ISSUED
8683254 12930491	25-MAR-2014 07-JAN-2011	SYSTEMS AND METHOD FOR PRECISE EVENT TIMING MEASUREMENTS	ANUE SYSTEMS, INC.	ISSUED
8533518 12930495	10-SEP-2013 07-JAN-2011	SYSTEMS AND METHODS FOR PRECISE TIMING MEASUREMENTS USING HIGH-SPEED DESERIALIZERS	ANUE SYSTEMS, INC.	ISSUED
8462781 13080906	11-JUN-2013 06-APR-2011	SYSTEMS AND METHODS FOR INLINE REMOVAL OF DUPLICATE NETWORK PACKETS	ANUE SYSTEMS, INC.	ISSUED
8098677 12462293	17-JAN-2012 31-JUL-2009	SUPERSET PACKET FORWARDING FOR OVERLAPPING FILTERS AND RELATED SYSTEMS AND METHODS	ANUE SYSTEMS, INC.	ISSUED
8018943 12462221	13-SEP-2011 31-JUL-2009	AUTOMATIC FILTER OVERLAP PROCESSING AND RELATED SYSTEMS AND METHODS	ANUE SYSTEMS, INC.	ISSUED
20130347103 13529970	26-DEC-2013 21-JUN-2012	PACKET CAPTURE FOR ERROR TRACKING	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130346756 13529479	26-DEC-2013 21-JUN-2012	BRANDING A COMMODITY DRIVE	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED

Notice of Substitution of Administrative Agent in Patents, Trademarks and Copyrights

PUBLICATION NO./		TITLE	CURRENT OWNER	STATUS
20130346736 13529910	26-DEC-2013 21-JUN-2012	SYSTEMS AND METHODS FOR BOOTING DEVICES USING ASSIGNED SERVERS IN A MULTIPLE- CARD COMPUTING SYSTEM	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130346719 13595335	26-DEC-2013 27-AUG-2012	SYSTEMS AND METHODS FOR EFFICIENT MEMORY ACCESS	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130346667 13529998	26-DEC-2013 21-JUN-2012	SERIAL PORT ACCESS SYSTEM AND METHOD IN A COMPUTING SYSTEM	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130346639 13530052	26-DEC-2013 21-JUN-2012	SYSTEMS AND METHODS FOR PROGRAMMING CONFIGURABLE LOGIC DEVICES VIA USB	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130346628 13529932	26-DEC-2013 21-JUN-2012	DYNAMICALLY ASSIGNED MAC ADDRESSES FOR DEVICES IN A COMPUTING SYSTEM	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130346415 13540830	26-DEC-2013 03-JUL-2012	SYSTEMS AND METHODS MULTI-KEY ACCESS TO DATA	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130343389 13529821	26-DEC-2013 21-JUN-2012	HIGH-SPEED CLD-BASED PIPELINE ARCHITECTURE	BREAKINGPOINT SYSTEMS, INC.	
20130343380 13530052	26-DEC-2013 21-JUN-2012	SYSTEMS AND METHODS FOR PROGRAMMING CONFIGURABLE LOGIC DEVICES VIA USB	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130343378 13529372	26-DEC-2013 21-JUN-2012	VIRTUAL DATA LOOPBACK AND/OR DATA CAPTURE IN A COMPUTING SYSTEM	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130343377 13529339	26-DEC-2013 21-JUN-2012	HASH-BASED PACKET DISTRIBUTION IN A COMPUTER SYSTEM	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
20130340977 13529207	26-DEC-2013 21-JUN-2012	HEAT SINK FOR USE IN AN ELECTRONICS SYSTEM	BREAKINGPOINT SYSTEMS, INC.	PUBLISHED
8929379 20130343387 13529535	06-JAN-2015 26-DEC-2013 21-JUN-2012	HIGH-SPEED CLD-BASED INTERNAL PACKET ROUTING	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8891528 13530094	18-NOV-2014 21-JUN-2012	MANAGING THE CAPTURE OF PACKETS IN A COMPUTING SYSTEM	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8891392 13529423	18-NOV-2014 21-JUN-2012	DYNAMIC LATENCY ANALYSIS SYSTEM	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8869157 13529248	21-OCT-2014 21-JUN-2012	SYSTEMS AND METHODS FO R DISTRIBUTING TASKS AND/OR PROCESSING RECOURSES IN A SYSTEM	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8856600 13530059	26-DEC-2013 21-JUN-2012	JTAG-BASED PROGRAMMING AND DEBUG	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8848741 13529786	30-SEP-2014 21-JUN-2012	HIGH-SPEED CLD-BASED TCP SEGMENTATION OFFLOAD	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8824508 13529745	02-SEP-2014 21-JUN-2012	HIGH-SPEED CLD-BASED TCP ASSEMBLY OFFLOAD	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8811401 13529693	19-AUG-2014 21-JUN-2012	BINDING OF NETWORK FLOWS TO PROCESS THREADS	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8773852 13529154	08-JUL-2014 21-JUN-2012	AIR FLOW MANAGEMENT DEVICE FOR USE IN AN ELECTRONICS SYSTEM	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8706921 13529983	22-APR-2014 21-JUN-2012	SOFTWARE INITIALIZATION OF USB DEVICES ON A SINGLE BUS	BREAKINGPOINT SYSTEMS, INC.	ISSUED

PATENT NO./ PUBLICATION NO./ APPLICATION NO.	PUB. DATE/	TITLE	CURRENT OWNER	STATUS
7773516 11560710	10-AUG-2010 16-NOV-2006	FOCUSED FUNCTION NETWORK PROCESSOR	BREAKINGPOINT SYSTEMS, INC.	ISSUED
8576713 12766704	05-NOV-2013 23-APR-2010	TRAFFIC GENERATOR WITH PRIORITY FLOW CONTROL	IXIA	ISSUED
20140173094 13718813	19-JUN-2014 18-DEC-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR CLASSIFYING APPLICATION TRAFFIC RECEIVED AT A NETWORK TRAFFIC EMULATION DEVICE THAT EMULATES MULTIPLE APPLICATION SERVERS	IXIA	PUBLISHED
20140169177 13716077	19-JUN-2014 14-DEC-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR PROCESSING MULTIPLE CONTROL AND USER DATA FLOWS AT A PORT PROCESSOR	IXIA	PUBLISHED
20140160927 13712499	12-JUN-2014 12-DEC-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR GENERATING SIMULATED NETWORK TRAFFIC USING DIFFERENT TRAFFIC FLOWS AND MAINTAINING A CONFIGURED DISTRIBUTION OF TRAFFIC BETWEEN THE DIFFERENT TRAFFIC FLOWS AND A DEVICE UNDER A TEST	IXIA	PUBLISHED
20140119213 13668203	01-MAY-2014 02-NOV-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR AUTOMATICALLY DECODING UPLINK DATA	IXIA	PUBLISHED
20140088950 13670450	27-MAR-2014 06-NOV-2012	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR PROVIDING A UNIFIED FRAMEWORK TO SUPPORT DIVERSE DATA GENERATION ENGINES	IXIA	PUBLISHED
20140089386 13650115	27-MAR-2014 11-OCT-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR PROVIDING MAPPING INFORMATION ASSOCIATED WITH PORT CONTROL (PCP) IN A TEST ENVIRONMENT	IXIA	PUBLISHED
20140086075 13668203	27-MAR-2014 02-NOV-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR SIMULATING CHANNEL CONDITIONS	IXIA	PUBLISHED
20140036700 13567747	06-FEB-2014 06-AUG-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR CONTROLLING TX AND RX THROUGHPUT OVER TCP	IXIA	PUBLISHED
20140003438 13538576	02-JAN-2014 29-JUN-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR UPDATING SEQUENCE AND ACKNOWLEDGEMENT NUMBERS ASSOCIATED WITH REPLAY PACKETS	IXIA	PUBLISHED
20130318291 13478083	28-NOV-2013 22-MAY-2012	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR GENERATING TEST PACKETS IN A NETWORK TEST DEVICE USING VALUE LIST CACHING	IXIA	PUBLISHED
20130312094	21-NOV-2013	METHODS, SYSTEMS, AND	IXIA	PUBLISHED

PATENT NO./ PUBLICATION NO./ APPLICATION NO.		TITLE	CURRENT OWNER	STATUS
13472116	15-MAY-2012	COMPUTER READABLE MEDIA FOR MEASURING DETECTION ACCURACY OF A SECURITY DEVICE USING BENIGN TRAFFIC		
20130310959 13472125	21-NOV-2013 15-MAY-2012	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR UTILIZING A PLURALITY OF PRE- ENCODED PAYLOADS TO GENERATE A PACKET STREAM TRANSMISSION	IXIA	PUBLISHED
20130305091 13623707	14-NOV-2013 20-SEP-2012	DRAG AND DROP NETWORK TOPOLOGY EDITOR FOR GENERATING NETWORK TEST CONFIGURATIONS	IXIA	PUBLISHED
20130305090 13467569	14-NOV-2013 09-MAY-2012	LOGICAL PORT AND LAYER PROTOCOL TEST CONFIGURATION RESOURCE MANAGER	IXIA	PUBLISHED
20130297806 13461762	07-NOV-2013 01-MAY-2012	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR BALANCING INCOMING CONNECTIONS ACROSS MULTIPLE CORES	IXIA	PUBLISHED
20130275606 13447160	17-OCT-2013 13-APR-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR HEURISTICS-BASED ADAPTIVE PROTOCOL PARSING	IXIA	PUBLISHED
20130235727 13418076	12-SEP-2013 12-MAR-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR PREVENTING TRAFFIC CONGESTION WITHIN A LONG TERM EVOLUTION (LTE) MULTI-USER EQUIPMENT (MULTI-UE) SIMULATOR DEVICE	IXIA	PUBLISHED
20130184023 13352058	18-JUL-2013 17-JAN-2012	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR LONG TERM EVOLUTION (LTE) UPLINK DATA PROCESSING	IXIA	PUBLISHED
20130166960 13336925	27-JUN-2013 23-DEC-2011	BYTE BY BYTE RECEIVED DATA INTEGRITY CHECK	IXIA	PUBLISHED
20130155872 13336005	20-JUN-2013 23-DEC-2011	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR REDUCING THE IMPACT OF FALSE DOWNLINK CONTROL INFORMATION (DCI) DETECTION IN LONG TERM EVOLUTION (LTE) PHYSICAL DOWNLINK CONTROL (PDCCH) DATA	IXIA	PUBLISHED
20130155867 13429384	20-JUN-2013 25-MAR-2012	SCALABLE ARCHITECTURE FOR LONG TERM EVOLUTION (LTE) MULTIPLE USER EQUIPMENT (MULTI-UE) SIMULATION	IXIA	PUBLISHED
20130148503 13324965	13-JUN-2013 13-DEC-2011	NETWORK IMPAIRMENT UNIT WITH BANDWIDTH-CONSTRAINED PACKET DUPLICATION	IXIA	PUBLISHED
20130124491 13294981	16-MAY-2013 11-NOV-2011	EFFICIENT PIPELINED BINARY SEARCH	IXIA	PUBLISHED
20130070584 13627325	21-MAR-2013 26-SEP-2012	NETWORK IMPAIRMENT UNIT FOR CONCURRENT DELAY AND PACKET QUEUE IMPAIRMENTS	IXIA	PUBLISHED

PUBLICATION NO./		TITLE	CURRENT OWNER	STATUS
20130064095 13228291	14-MAR-2013 14-MAR-2013	TRAFFIC ITEM IMPAIRMENT EMULATION	IXIA	PUBLISHED
20130063441 13229584	14-MAR-2013 09-SEP-2011	MEASURING AND DISPLAYING BANDWIDTH CONTENTION	IXIA	PUBLISHED
20120311621 13286148	06-DEC-2012 31-OCT-2011	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR MEASURING MULTICAST LATENCY	IXIA	PUBLISHED
20120303887 13115078	29-NOV-2012 24-MAY-2011	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR CACHING AND USING SCATTER LIST METADATA TO CONTROL DIRECT MEMORY ACCESS (DMA) RECEIVING OF NETWORK PROTOCOL DATA	IXIA	PUBLISHED
20120230208 13044329	13-SEP-2012 09-MAR-2011	METADATA CAPTURE FOR TESTING TCP CONNECTIONS	IXIA	PUBLISHED
20120033562 12850505	09-FEB-2012 04-AUG-2010	HIGH PRECISION PACKET GENERATION IN SOFTWARE USING A HARDWARE TIME STAMP COUNTER	IXIA	PUBLISHED
20110029678 12533961	03-FEB-2011 31-JUL-2009	COMMUNICATIONS USING THE COMMON OBJECT REQUEST BROKER ARCHITECTURE (COBRA)	IXIA	PUBLISHED
20110026521 12533957	03-FEB-2011 31-JUL-2009	APPARATUS AND METHODS FOR FORWARDING DATA PACKETS CAPTURED FROM A NETWORK	IXIA	ISSUED
20100172251 12406912	08-JUL-2010 18-MAR-2009	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR COMBINING VOICE OVER INTERNET PROTOCOL (VOIP) CALL DATA WITH GEOGRAPHICAL INFORMATION	IXIA	PUBLISHED
8914432 20050041592 10646983	16-DEC-2014 24-FEB-2005 21-AUG-2003	REAL WORLD TRAFFIC	IXIA	ISSUED
8929294 20140140271 13682663	06-JAN-2015 22-MAY-2014 20-NOV-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR RAPID DECODING OF WIRELESS COMMUNICATIONS NETWORK UPLINK DATA	IXIA	ISSUED
8913965 20140141728 13680964	16-DEC-2014 22-MAY-2014 19-NOV-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR DETECTING ANTENNA PORT MISCONFIGURATIONS	IXIA	ISSUED
8908535 13371389	09-DEC-2014 10-FEB-2012	METHODS, TRAFFIC SIMULATORS, AND COMPUTER READABLE MEDIA FOR VALIDATING LONG TERM EVOLUTION (LTE) CODE BLOCKS AND TRANSPORT BLOCKS	IXIA	ISSUED
8892829 13408787	18-NOV-2014 29-FEB-2012	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR INTEGRATED SUB-BLOCK INTERLEAVING AND RATE MATCHING	IXIA	ISSUED
8855989 20120150521	14-JUN-2012	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR	IXIA	ISSUED?

PATENT NO./ PUBLICATION NO./ APPLICATION NO.		TITLE	CURRENT OWNER	STATUS
13154166	06-JUN-2011	SIMULATING REALISTIC MOVEMENT OF USER EQUIPMENT IN A LONG TERM EVOLUTION NETWORK (LTE)		
8855141 13631847	07-OCT-2014 28-SEP-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR UTILIZING METADATA TO DETECT USER DATAGRAM PROTOCOL (UDP) PACKET TRAFFIC LOSS	IXIA	ISSUED
8855070 13326264	07-OCT-2014 14-DEC-2011	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR IMPROVED LONG TERM EVOLUTION (LTE) HYBRID AUTOMATIC REPEAT REQUEST (HARQ) PROCESSING	IXIA	ISSUED
8832309 13517538	09-SEP-2014 13-JUN-2012	GENERATING PACKETS WITH LOW OVERHEAD SELECTABLE SEQUENCE NUMBER GENERATION	IXIA	ISSUED
8819834 13527565	26-AUG-2014 19-JUN-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR AUTOMATICALLY GENERATING A FUZZER THAT IMPLEMENTS FUNCTIONAL AND FUZZ TESTING AND TESTING A NETWORK DEVICE USING THE FUZZER	IXIA	ISSUED
8819245 12951963	26-AUG-2014 22-NOV-2010	PROCESSOR ALLOCATION FOR MULTI-CORE ARCHITECTURES	IXIA	ISSUED
8804716 13458602	12-AUG-2014 27-APR-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR EVOLVED GENERAL PACKET RADIO SERVICE (GPRS) TUNNELING PROTOCOL (EGTP) INDIRECT TUNNELING IN A VOICE OVER LTE (VOLTE) SIMULATION	IXIA	ISSUED
8788652 12510163	22-JUL-2014 27-JUL-2009	REAL WORLD NETWORK TESTING COMBINING LOWER LAYER NETWORK TESTS, APPLICATION LAYER TESTS AND INTERDEPENDENT INTERACTIONS	IXIA	ISSUED
8776243 13458045	08-JUL-2014 27-APR-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR COMBINING IP FRAGMENTATION EVASION TECHNIQUES	IXIA	ISSUED
8774202 13469057	08-JUL-2014 10-MAY-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR GENERATING GENERAL PACKET RADIO SERVICE TUNNELING PROTOCOL (GTP) ENCAPSULATED REAL-TIME TRANSPORT PROTOCOL (RTP) PACKETS IN A LONG TERM EVOLUTION (LTE) NODE SIMULATOR	IXIA	ISSUED
8773984 13556028	08-JUL-2014 23-JUL-2012	METHOD AN SYSTEM FOR MEASURING NETWORK CONVERGENCE TIME	IXIA	ISSUED
8767565 13231885	01-JUL-2014 13-SEP-2013	FLEXIBLE NETWORK TEST APPARATUS	IXIA	ISSUED
8745381 13276906	03-JUN-2014 19-OCT-2011	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR PERFORMING ENCAPSULATING SECURITY PAYLOAD (ESP) REHASHING	IXIA	ISSUED

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8738985 13431975	27-MAY-2014 28-MAR-2012	INSTRUCTION GENERATING APPARATUS INCLUDING A RECEIVING SECTION, A DETERMINING SECTION, AND A GENERATION SECTION, DOCUMENT PROCESSING SYSTEM, AND A COMPUTER READABLE MEDIUM	IXIA	ISSUED
8730826 12948582	20-MAY-2014 17-NOV-2010	TESTING FRAGMENT REASSEMBLY	IXIA	ISSUED
8724498 13396577	13-MAY-2014 14-FEB-2012	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR PERFORMING LONG TERM EVOLUTION (LTE) CHANNEL DELINEATION	IXIA	ISSUED
8724473 12838360	13-MAY-2014 16-JUL-2010	LOCATING SIGNATURES IN PACKETS	IXIA	ISSUED
8717925 13334496	06-MAY-2014 22-DEC-2011	TESTING TCP CONNECTION RATE	IXIA	ISSUED
8707100 13324960	22-APR-2014 13-DEC-2011	TESTING A NETWORK USING RANDOMLY DISTRIBUTED COMMANDS	IXIA	ISSUED
8700632 13353188	14-APR-2014 18-JAN-2012	MANAGING HETEROGENEOUS DATA	IXIA	ISSUED
8694626 12914820	08-APR-2014 28-OCT-2010	AUTOMATED CHARACTERIZATION OF NETWORK TRAFFIC	IXIA	ISSUED
8687518 13623680	01-APR-2014 20-SEP-2012	AUTOMATIC ADDRESS CONFIGURATION IN A NETWORK TEST SYSTEM	IXIA	ISSUED
8687483 13240746	01-APR-2014 22-SEP-2011	PARALLEL TRAFFIC GENERATOR WITH PRIORITY FLOW CONTROL	IXIA	ISSUED
8681650 13224080	25-MAR-2014 01-SEP-2011	SYSTEMS, METHODS AND COMPUTER READABLE MEDIA FOR PACKET CLASSIFICATION PREVIEWING	IXIA	ISSUED
8655969 13486969	18-FEB-2014 01-JUN-2012	STATISTICS REPORTING IN A NETWORK TEST SYSTEM	IXIA	ISSUED
8654643 13192038	18-FEB-2014 27-JUL-2011	WIDE FIELD INDEXING FOR PACKET TRACKING	IXIA	ISSUED
8649395 13372325	11-FEB-2014 13-FEB-2012	PROTOCOL STACK USING SHARED MEMORY	IXIA	ISSUED
8649285 13005467	11-FEB-2014 12-JAN-2011	TRACKING PACKET SEQUENCE NUMBERS	IXIA	ISSUED
8649275 13009427	22-FEB-2014 19-JAN-2011	FAST SSL TESTING USING PRECALCULATED CRYPTOGRAPHY DATA	IXIA	ISSUED
8649271 12797518	11-FEB-2014 09-JUN-2010	TESTING NETWORK EQUIPMENT	IXIA	ISSUED
8625451 13111898	07-JAN-2014 19-MAY-2011	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR NON INTRUSIVE MEAN OPINION SCORE (MOS) ESTIMATION BASED ON PACKET LOSS PATTERN	IXIA	ISSUED
8614955 12564838	24-DEC-2013 22-SEP-2009	MISDIRECTED PACKET DETECTION APPARATUS AND METHOD	IXIA	ISSUED

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8588082 12565412	19-NOV-2013 23-SEP-2009	NETWORK TESTING USING CONTROL PLANE AND DATA PLAN CONVERGENCE	IXIA	ISSUED
8582466 13672335	12-NOV-2013 08-NOV-2012	FLOW STATISTICS AGGREGATION	IXIA	ISSUED
8572260 12970138	29-OCT-2013 16-DEC-2010	PREDETERMINED PORTS FOR MULTI-CORE ARCHITECTS	IXIA	ISSUED
8571032 12948567	29-OCT-2013 17-NOV-2010	TESTING PACKET FRAGMENTATION	IXIA	ISSUED
8537839 12871711	17-SEP-2013 30-AUG-2010	TRAFFIC GENERATOR WITH DYNAMIC MPLS LABEL ASSIGNMENT	IXIA	ISSUED
8527665 13088160	03-SEP-2013 15-APR-2011	REDIRECTING FUNCTIONAL CALLS	IXIA	ISSUED
8526470 13176621	03-SEP-2013 05-JUL-2011	SYNCHRONIZED COMMANDS FOR NETWORK TESTING	IXIA	ISSUED
8526334 13315896	03-SEP-2013 09-DEC-2011	CHOOSING CONNECTABLE END POINTS FOR NETWORK TEST	IXIA	ISSUED
8520529 13234060	27-AUG-2013 15-SEP-2011	REORDERING NETWORK TRAFFIC	IXIA	ISSUED
8472167 12898209	25-JUN-2013 05-OCT-2010	HIGH CURRENT CLAMPING CONNECTOR	IXIA	ISSUED
8457128 13101987	04-JUN-2013 05-MAY-2011	CAPTURING PACKETS WITH PARALLEL CAPTURE ENGINES	IXIA	ISSUED
8441940 13217081	14-MAY-2013 24-AUG-2011	PARALLEL PACKET PROCESSOR WITH SESSION ACTIVE CHECKER	IXIA	ISSUED
8417478 12889271	09-APR-2013 23-SEP-2010	NETWORK TEST CONFLICT CHECKING	IXIA	ISSUED
8391157 12140103	05-MAR-2013 16-JAN-2008	DISTRIBUTED FLOW ANALYSIS	IXIA	ISSUED
8369225 125655657	05-FEB-2013 23-SEP-2009	NETWORK TESTING PROVIDING FOR CONCURRENT REAL-TIME INGRESS AND EGRESS VIEWING OF NETWORK TRAFFIC DATA	IXIA	ISSUED
8363557 12475451	29-JAN-2013 29-MAY-2009	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR REMOTELY EVALUATING AND CONTROLLING VOICE OVER IP (VOIP) SUBSCRIBER TERMINAL EQUIPMENT	IXIA	ISSUED
8339986 11590394	25-DEC-2012 31-OCT-2006	INSTRUMENTATION OF MPEG-2 TRANSPORT STREAMS FOR TESTING NETWORK PERFORMANCE	IXIA	ISSUED
8310942 12870729	13-NOV-2012 27-AUG-2010	FLOW STATISTICS AGGREGATION	IXIA	ISSUED
8300530 11672860	30-OCT-2012 08-FEB-2007	DETECTING MEDIA RATE FOR MEASURING NETWORK JITTER	IXIA	ISSUED

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8248926 12777389	21-AUG-2012 11-MAY-2010	PACKET RATE DETECTION APPARATUS AND METHOD	IXIA	ISSUED
8244891 10795923	14-AUG-2012 08-MAR-2004	SIMULATING A LARGE NUMBER OF USERS	IXIA	ISSUED
8243760 12496415	14-AUG-2012 01-JUL-2009	SCHEDULER USING A PLURALITY OF SLOW TIMERS	IXIA	ISSUED
8239904 12608885	07-AUG-2012 29-OCT-2009	VIDEO PATH CONFIRMATION	IXIA	ISSUED
8233399 12603335	31-JUL-2012 21-OCT-2009	GENERIC PACKET GENERATOR AND METHOD	IXIA	ISSUED
8229416 12337285	24-JUL-2012 17-DEC-2008	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR STRESS TESTING MOBILE NETWORK EQUIPMENT USING A COMMON PUBLIC RADIO INTERFACE (CPRI)	IXIA	ISSUED
8223653 10818823	17-JUL-2012 05-APR-2004	BROADCAST CAPABLE FILE SYSTEM	IXIA	ISSUED
8180856 11532035	15-MAY-2012 14-SEP-2006	TESTING A NETWORK	IXIA	ISSUED
8165025 11608263	24-APR-2012 08-DEC-2006	METHOD AND APPARATUS FOR GENERATING A UNIQUE PACKET IDENTIFIER	IXIA	ISSUED
8159957 12488405	17-APR-2012 19-JUN-2009	HARDWARE TIME STAMPING AND SYNCHRONIZED DATA TRANSMISSION	IXIA	ISSUED
8134927 12533951	13-MAR-2012 31-JUL-2009	APPARATUS AND METHODS FOR CAPTURING DATA PACKETS FROM A NETWORK	IXIA	ISSUED
8121148 11298106	21-FEB-2012 09-DEC-2005	PROTOCOL STACK USING SHARED MEMORY	IXIA	ISSUED
8116433 12759495	14-FEB-2012 13-APR-2010	CALLS PER SECOND NETWORK TESTING	IXIA	ISSUED
8086660 10851303	27-DEC-2011 21-MAY-2004	DISTRIBUTED DATA MODEL	IXIA	ISSUED
8085673 11562640	27-DEC-2011 22-NOV-2006	METHOD AND APPARATUS FOR GENERATING BIDIRECTIONAL NETWORK TRAFFIC AND COLLECTING STATISTICS ON SAME	IXIA	ISSUED
8081578 12395657	20-DEC-2011 28-FEB-2009	METHODS, SYSTEMS AND COMPUTER READABLE MEDIA FOR AUTOMATICALLY CATEGORIZING VOICE OVER INTERNET PROTOCOL (VOIP) SUBSCRIBER DEVICES IN ACCORDANCE WITH VOIP TEST AND CALL QUALITY DATA	IXIA	ISSUED
8078736 13196708	13-DEC-2011 02-AUG-2011	VIRTUAL INTERFACE	IXIA	ISSUED

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8073966 12639879	06-DEC-2011 16-DEC-2009	VIRTUAL INTERFACE	IXIA	ISSUED
8068429 11756460	29-NOV-2011 31-MAY-2007	TRANSMIT SCHEDULING	IXIA	ISSUED
8050175 12627925	01-NOV-2011 30-NOV-2009	DISTRIBUTED PACKET GROUP IDENTIFICATION FOR NETWORK TESTING	IXIA	ISSUED
8046720 10316445	25-OCT-2011 10-DEC-2002	GRAPHICAL SYSTEM FOR EDITING MULTI-LAYER DATA PACKETS	IXIA	ISSUED
8014295 12502956	06-SEP-2011 14-JUL-2009	PARALLEL PACKET PROCESSOR WITH SESSION ACTIVE CHECKER	IXIA	ISSUED
8009687 11692645	30-AUG-2011 28-MAR-2007	MEASUREMENT OF NETWORK PERFORMANCE IN TRANSPORTING PACKET STREAMS	IXIA	ISSUED
8006253 11847713	23-AUG-2011 30-AUG-2007	VERSION-ADAPTIVE SERIALIZATION AND DESERIALIZATION	IXIA	ISSUED
8005958 10608491	23-AUG-2011 27-JUN-2003	VIRTUAL INTERFACE	IXIA	ISSUED
7925793 11756470	12-APR-2011 31-MAY-2007	RECONFIGURABLE TEST SYSTEM	IXIA	ISSUED
7908130 10317312	15-MAR-2011 12-DEC-2002	MODELING AGGREGATE TRANSPORT LAYER NETWORK TRAFFIC BEHAVIOR WITH FEEDBACK CONTAINING PACKET LOSS INFORMATION	IXIA	ISSUED
7890821 11867580	15-FEB-2011 04-OCT-2007	CHANNEL IMPAIRMENT EMULATOR SYSTEMS AND METHODS	IXIA	ISSUED
7869372 12326606	11-JAN-2011 02-DEC-2008	METHOD AND SYSTEM FOR VERIFYING A GATEWAY TO A NETWORK	IXIA	ISSUED
7869371 12158298	11-JAN-2011 19-JUN-2008	METHOD AND SYSTEM FOR TESTING A CONNECTION	IXIA	ISSUED
7849439 11038597	07-DEC-2010 19-JAN-2015	APPLICATION – GENERIC SEQUENCE DIAGRAM GENERATOR DRIVEN BY A NON-PROPRIETARY LANGUAGE	IXIA	ISSUED
7840664 10651427	23-NOV-2010 29-AUG-2003	AUTOMATED CHARACTERIZATION OF NETWORK TRAFFIC	IXIA	ISSUED
7827295 12146363	02-NOV-2010 25-JUN-2008	PROTOCOL STACK	IXIA	ISSUED
7826377 11424832	02-NOV-2010 16-JUN-2006	MEMORY ACCESS OPTIMIZATION AND COMMUNICATIONS STATISTICS COMPUTATION	IXIA	ISSUED
7821962 12267364	26-OCT-2010 07-NOV-2008	MEMORY ACCESS OPTIMIZATION	IXIA	ISSUED
7769049 12253836	03-AUG-2010 17-OCT-2008	TRAFFIC GENERATOR USING PARALLEL COHERENT TRANSMIT ENGINES	IXIA	ISSUED
7710886 11971407	04-MAY-2010 09-JAN-2008	GENERATING TRAFFIC FROM A PREDETERMINED AMOUNT OF PROCESSED TRAFFIC	IXIA	ISSUED
7702330 11461097	20-APR-2010 31-JUL-2006	METHOD AND APPARATUS FOR WIRELESS MOBILITY MEASUREMENTS	IXIA	ISSUED

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7672669 11488396	02-MAR-2010 18-JUL-2006	METHOD AND APPARATUS FOR CONTROLLABLE SIMULATION OF MOBILITY	IXIA	ISSUED
7643431 11558855	05-JAN-2010 10-NOV-2006	DISTRIBUTED PACKET GROUP IDENTIFICATION FOR NETWORK TESTING	IXIA	ISSUED
7636317 11561833	22-DEC-2009 20-NOV-2006	COMMUNICATIONS TEST SYSTEM WITH MULTILEVER SCHEDULER	IXIA	ISSUED
7627669 10831452	01-DEC-2009 22-APR-2004	AUTOMATED CAPTURING AND CHARACTERIZATION OF NETWORK TRAFFIC USING FEEDBACK	IXIA	ISSUED
7616577 11002078	10-NOV-2009 03-DEC-2004	METHOD AND SYSTEM FOR CONNECTION VERIFICATION	IXIA	ISSUED
7616568 11557059	10-NOV-2009 06-NOV-2006	GENERIC PACKET GENERATION	IXIA	ISSUED
7561559 11095096	14-JUL-2009 30-MAR-2005	HARDWARE TIME STAMPING AND PROCESSOR SYNCHRONIZATION	IXIA	ISSUED
7558565 11022156	07-JUL-2009 22-DEC-2004	METHODS AND APPARATUS FOR WIRELESS NETWORK LOAD GENERATOR CLUSTERING	IXIA	ISSUED
7539489 10815823	26-MAY-2009 02-APR-2004	LOCATION-BASED TESTING FOR WIRELESS DATA COMMUNICATION NETWORKS	IXIA	ISSUED
7516216 11462351	07-APR-2009 03-AUG-2006	GENERATING TRAFFIC FOR TESTING A SYSTEM UNDER TEST	IXIA	ISSUED
7515916 10944759	07-APR-2009 21-SEP-2004	METHOD AND APPARATUS FOR MULTI-DIMENSIONAL CHANNEL SOUNDING AND RADIO FREQUENCY PROPAGATION MEASUREMENTS	IXIA	ISSUED
7515585 11040646	07-APR-2009 21-JAN-2005	DATA COMMUNICATION OPTIMIZATION	IXIA	ISSUED
7502327 11002122	10-MAR-2009 03-DEC-2004	METHOD AND SYSTEM FOR TESTING NETWORK CONNECTIONS	IXIA	ISSUED
7496688 10768824	24-FEB-2009 30-JAN-2004	LABEL SWITCHED DATA UNIT CONTENT EVALUATION	IXIA	ISSUED
7496664 11626484	24-FEB-2009 24-JAN-2007	METHOD FOR TESTING STATEFUL NETWORK COMMUNICATION DEVICES	IXIA	ISSUED
7467078 10893668	16-DEC-2008 16-JUL-2004	PORTABLE DISTRIBUTED APPLICATION FRAMEWORK	IXIA	ISSUED
7440415 10448969	21-OCT-2008 30-MAY-2003	VIRTUAL NETWORK ADDRESSES	IXIA	ISSUED
7437496 11380893	14-OCT-2008 28-APR-2006	HOT SWAP ADAPTER	IXIA	ISSUED
7436831 11018034	14-OCT-2008 20-DEC-2004	WIRELESS NETWORK LOAD GENERATOR DYNAMIC MAC HARDWARE ADDRESS MANIPULATION	IXIA	ISSUED
7433450 10670261	07-OCT-2008 26-SEP-2003	METHOD AND SYSTEM FOR CONNECTION VERIFICATION	IXIA	ISSUED
7414975 11089845	19-AUG-2008 24-MAR-2005	PROTOCOL STACK	IXIA	ISSUED
7412034 11255403	12-AUG-2008 20-OCT-2005	MULTI-PROTOCOL, MULTI- INTERFACE COMMUNICATIONS	IXIA	ISSUED

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		DEVICE TESTING SYSTEM		
7327687 11021890	05-FEB-2008 23-DEC-2004	WIRELESS NETWORK VIRTUAL STATION ADDRESS TRANSLATION WITH EXTERNAL DATA SOURCE	IXIA	ISSUED
7327686 10706404	05-FEB-2008 12-NOV-2003	GENERATING PROCESSED TRAFFIC	IXIA	ISSUED
7278061 10266507	02-OCT-2007 08-OCT-2002	BUILDING PACKETS OF DATA FOR TESTING A COMMUNICATION NETWORK	IXIA	ISSUED
7277395 10424161	02-OCT-2007 25-APR-2003	METHOD AND APPARATUS FOR WIRELESS NETWORK LOAD EMULATION	IXIA	ISSUED
7257082 10404864	14-AUG-2007 31-MAR-2003	SELF-SIMILAR TRAFFIC GENERATION	IXIA	ISSUED
7207046 09645048	17-APR-2007 23-AUG-2000	METHOD AND SYSTEM FOR PROVIDING STRING-OVER-SOCKET SCRIPTING LANGUAGE ACCESS TO DISTRIBUTED OBJECT MODEL INTERFACES	IXIA	ISSUED
7194535 09968432	20-MAR-2007 01-OCT-2001	METHODS AND SYSTEMS FOR TESTING STATEFUL NETWORK COMMUNICATIONS DEVICES	IXIA	ISSUED
7162377 10745043	09-JAN-2007 22-DEC-2003	TESTING AND EMULATING A DEVICE'S POWER CHARACTERISTICS	IXIA	ISSUED
7123616 10899682	17-OCT-2006 27-JUL-2004	DETERMINING ROUND-TRIP DELAY	IXIA	ISSUED
7111204 10210798	19-SEP-2006 01-AUG-2002	SLEUTHING SYSTEM AND METHOD FOR LOAD-TESTING A NETWORK SERVER	IXIA	ISSUED
7099438 10172548	29-AUG-2006 14-JUN-2002	MULTI-PROTOCOL, MULTI- INTERFACE COMMUNICATIONS DEVICE TESTING SYSTEM	IXIA	ISSUED
7080348 10608603	18-JUL-2006 27-JUN-2003	CREATING POLYNOMIAL DIVISION LOGICAL DEVICES	IXIA	ISSUED
6999891 10789697	14-FEB-2006 27-FEB-2004	INDEPENDENT DESKEW LANE	IXIA	ISSUED
6993578 09456603	31-JAN-2006 08-DEC-1999	METHOD AND SYSTEM FOR MANAGING PERFORMANCE DATA ABOUT A NETWORK	IXIA	ISSUED
6950405 09906882	27-SEP-2005 16-JUL-2001	TRAFFIC STREAM GENERATOR HAVING A NON-CONSECUTIVE ADDRESSING MECHANISM	IXIA	ISSUED
6791943 09032622	14-SEP-2004 27-FEB-1998	EVENT-BASED TECHNIQUE FOR DETERMINING INSTANTANEOUS CELL BANDWIDTH IN A DIGITAL COMMUNICATIONS NETWORK	IXIA	ISSUED
6765874 09709395	20-JUL-2004 13-NOV-2000	ATM SERVICE DISRUPTION MEASUREMENT	IXIA	ISSUED
6732061 09451376	04-MAY-2004 30-NOV-1999	MONITORING SYSTEM AND METHOD IMPLEMENTING A CHANNEL PLAN	IXIA	ISSUED
6717917 09591092	06-APR-2004 09-JUN-2000	METHOD OF DETERMINING REAL- TIME DATA LATENCY AND APPARATUS THEREFOR	IXIA	ISSUED

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6424628 09209777	23-JUL-2002 11-DEC-1998	ANALYSING SIGNALS	IXIA	ISSUED
6408335 09158461	18-JUN-2002 22-SEP-1998	METHOD, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR PERFORMANCE TESTING BETWEEN ENDPOINT NODES OF A COMMUNICATION NETWORK	IXIA	ISSUED
6122757 08884143	19-SEP-2000 27-JUN-1997	CODE GENERATING SYSTEM FOR IMPROVED PATTERN MATCHING IN A PROTOCOL ANALYZER	IXIA	ISSUED
6072343 09084070	06-JUN-2000 22-MAY-1998	CLOCK AND TRIGGER DESIGN FOR LARGE INSTRUMENT	IXIA	ISSUED
6061725 09229031	09-MAY-2000 12-JAN-1999	ENDPOINT NODE SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR APPLICATIONS TRAFFIC BASED COMMUNICATIONS NETWORK PERFORMANCE TESTING	IXIA	ISSUED
6028847 08904188	22-FEB-2000 31-JUL-1997	MULTIPLE STREAM TRAFFIC EMULATOR	IXIA	ISSUED
6011868 08832624	04-JAN-2000 04-APR-1997	BITSTREAM QUALITY ANALYZER	IXIA	ISSUED
5937165 08711248	10-AUG-1999 10-SEP-1996	SYSTEMS, METHODS AND COMPUTER PROGRAM PRODUCTS FOR APPLICATIONS TRAFFIC BASED COMMUNICATIONS NETWORK PERFORMANCE TESTING	IXIA	ISSUED
5881237 08711195	09-MAR-1999 10-SEP-1996	METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR TEST SCENARIO BASED COMMUNICATIONS NETWORK PERFORMANCE TESTING	IXIA	ISSUED
5838919 08711607	17-NOV-1998 10-SEP-1996	METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR ENDPOINT PAIR BASED COMMUNICATIONS NETWORK PERFORMANCE TESTING	IXIA	ISSUED
5778013 08584804	07-JUL-1998 11-JAN-1996	METHOD AND APPARATUS FOR VERIFYING CRC CODES	IXIA	ISSUED
5774497 08632036	30-JUN-1998 12-APR-1996	METHOD AND APPARATUS FOR PCR JITTER MEASUREMENT IN A MPEG-2 TRANSPORT STREAM	IXIA	ISSUED
20140229605 13765628	14-AUG-2014 12-FEB-2013	ARRANGEMENTS FOR MONITORING NETWORK TRAFFIC ON A CLOUD- COMPUTING ENVIRONMENT AND METHODS THEREOF	NET OPTICS, INC.	PUBLISHED
20140022891 13944801	23-JAN-2014	ARRANGEMENTS AND METHODS FOR MINIMIZING DELAY IN HIGH- SPEED TAPS	NET OPTICS, INC.	PUBLISHED
20130347062 13944795	26-DEC-2013 17-JUL-2013	SECURED NETWORK ARRANGEMENT AND METHODS THEREOF	NET OPTICS, INC.	PUBLISHED
20120176917 13346651	12-JUL-2012 09-JAN-2012	INTEGRATED SWITCH TAP ARRANGEMENT AND METHODS THEREOF	NET OPTICS, INC.	PUBLISHED
20110264797 13092671	27-OCT-2011 22-APR-2011	INTEGRATED NETWORK DATA COLLECTION ARRANGEMENT AND METHODS THEREOF	NET OPTICS, INC.	PUBLISHED

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20110211492 13034733	01-SEP-2011 25-FEB-2011	IBYPASS HIGH DENSITY DEVICE AND METHODS THEREOF	NET OPTICS, INC.	PUBLISHED
20110214181 13034736	01-SEP-2011 25-FEB-2011	DUAL BYPASS MODULE AND METHODS THEREOF	NET OPTICS, INC.	PUBLISHED
8902735 13034730	02-DEC-2014 25-FEB-2011	GIGABITS ZERO-DELAY TAP AND METHODS THEREFOR	NET OPTICS, INC.	ISSUED
8755293 13070086	17-JUN-2014 23-MAR-2011	TIME MACHINE DEVICE AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
8737197 13034732	27-MAY-2014 25-FEB-2011	SEQUENTIAL HEARTBEAT PACKET ARRANGEMENT AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
8654932 12839373	18-FEB-2014 19-JUL-2010	INTELLIGENT COMMUNICATIONS NETWORK TAP PORT AGGREGATOR AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
8582472 13036842	12-NOV-2013 28-FEB-2011	ARRANGEMENT FOR AN ENHANCED COMMUNICATION NETWORK TAP PORT AGGREGATOR AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
8537690 13230760	17-SEP-2013 12-SEP-2011	DIRECTOR DEVICE ARRANGEMENT WITH VISUAL DISPLAY ARRANGEMENT AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
8432827 13042135	30-APR-2013 07-MAR-2011	ARRANGEMENT FOR UTILIZATION RATE DISPLAY AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
8369218 10834448	05-FEB-2013 28-APR-2004	ZERO-INTERRUPT NETWORK TAP	NET OPTICS, INC.	ISSUED
8320399 12714404	27-NOV-2012 26-FEB-2010	ADD-ON MODULE AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
8320242 11174033	27-NOV-2012 01-JUL-2005	ACTIVE RESPONSE COMMUNICATIONS NETWORK TAP	NET OPTICS, INC.	ISSUED
8094576 12481847	10-JAN-2012 10-JUN-2009	INTEGRATED SWITCH TAP ARRANGEMENT WITH VISUAL DISPLAY ARRANGEMENT AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
8018856 12705195	13-SEP-2011 12-FEB-2010	DIRECTOR DEVICE WITH VISUAL DISPLAY ARRANGEMENT AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
7903576 11835233	08-MAR-2011 07-AUG-2007	METHODS AND ARRANGEMENT FOR UTILIZATION RATE DISPLAY	NET OPTICS, INC.	ISSUED
7898984 11835228	01-MAR-2011 07-AUG-2007	ENHANCED COMMUNICATION NETWORK TAP PORT AGGREGATOR ARRANGEMENT AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
7822340 11925626	26-OCT-2010 26-OCT-2007	PHOTODIODE ASSEMBLY WITHIN A FIBER OPTIC TAP AND METHODS THEREOF	NET OPTICS, INC.	ISSUED
7773529 11965668	10-AUG-2010 27-DEC-2007	DIRECTOR DEVICE AND METHODS THEREFOR	NET OPTICS, INC.	ISSUED
7760859 11370487	20-JUL-2010 07-MAR-2006	INTELLIGENT COMMUNICATIONS NETWORK TAP PORT AGGREGATOR	NET OPTICS, INC.	ISSUED
7599301 11174238	06-OCT-2009 01-JUL-2005	COMMUNICATIONS NETWORK TAP WITH HEARTBEAT MONITOR	NET OPTICS, INC.	ISSUED
7522543	21-APR-2009	HIGH-SPEED COMMUNICATIONS	NET OPTICS,	ISSUED

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11223477	08-SEP-2005	NETWORK TAP WITH ZERO DELAY	INC.	
7499412 11174248	03-MAR-2009 01-JUL-2005	ACTIVE PACKET CONTENT ANALYZER FOR COMMUNICATIONS NETWORK	NET OPTICS, INC.	ISSUED
7486625 11174032	03-FEB-2009 01-JUL-2005	COMMUNICATIONS NETWORK TAP WITH LINK FAULT DETECTOR	NET OPTICS, INC.	ISSUED
7486624 10667107	03-FEB-2009 19-SEP-2003	MULTIPLE AND PARALLEL ACCESS NETWORK TAP FOR GIGABIT INTERNET LANS	NET OPTICS, INC.	ISSUED
D570351 29255426	03-JUN-2008 07-MAR-2006	PANEL FOR RACK MOUNTED ELECTRONIC DEVICE	NET OPTICS, INC.	ISSUED
D560165 29260857	22-JAN-2008 01-JUN-2006	PORTABLE NETWORK TAP	NET OPTICS, INC.	ISSUED

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GEL2 V. 2.4 FPGA.	TXU 001752532	30-MAR-2011	ANUE SYSTEMS, INC.	REGISTERED
GEL2 V. 2.4 SOFTWARE SOURCE	TXU 001752534	30-MAR-2011	ANUE SYSTEMS, INC.	REGISTERED
HGEM_ML2 V. 3.2 FPGA SOURCE	TXU 001752535	30-MAR-2011	ANUE SYSTEMS, INC.	REGISTERED
HILO V. 5.0.2 SOFTWARE SOURCE	TXU 001752533	30-MAR-2011	ANUE SYSTEMS, INC.	REGISTERED
HSFC_ML2 V. 1.6 FPGA SOURCE	TXU 001752537	30-MAR-2011	ANUE SYSTEMS, INC.	REGISTERED
XGEM V.3.0 FPGA SOURCE	TXU 001752536	30-MAR-2011	ANUE SYSTEMS, INC.	REGISTERED

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SCHEDULE C

Trademarks

MARK	CLASS	APP. NO./ APP. DATE	REG. NO./ REG. DATE	CURRENT OWNER
ANUE TRANSLATION: RAINBOW	9 42	77915530 20-JAN-2010	4298483 05-MAR-2013	ANUE SYSTEMS, INC.
(aurs)				
ANUE SYSTEMS TRANSLATION: RAINBOW SYSTEMS	9 42	77914388 19-JAN-2010	4298481 05-MAR-2013	ANUE SYSTEMS, INC.
A	9	77912515 15-JAN-2010	4328597 30-APR-2013	ANUE SYSTEMS, INC.
NET TOOL OPTIMIZER Net Tool Optimizer	9	77829046 17-SEP-2009	4123421 10-APR-2012	ANUE SYSTEMS, INC.
BREAKINGPOINT	9 42	78762836 29-NOV-2005	3607653 14-APR-2009	BREAKINGPOINT SYSTEMS, INC.
XCELLON-MULTIS	9	85778478 13-NOV-2012	4580904 05-AUG-2014	IXIA
IXCLOUDPERF	9	85756114 17-OCT-2012		IXIA
IMPAIRNET	9	85278307 28-MAR-2011	4151381 29-MAY-2012	IXIA
ENABLING A CONVERGED WORLD	9	85226077 25-JAN-2011	4085080 10-JAN-2012	IXIA
XDENSITY	9	85221806 20-JAN-2011	4119489 27-MAR-2012	IXIA
IXCATAPULT	9	85183325 23-NOV-2010	3966464 24-MAY-2011	IXIA
XCELLON-LAVA	9	85159355 22-OCT-2010	4088854 17-JAN-2012	IXIA
XCELLON	9	85145976 06-OCT-2010	4091962 24-JAN-2012	IXIA
XCELLON-FLEX	9	85145980 06-OCT-2010	4088784 17-JAN-2012	AIXI

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XCELLON-ULTRA	9	85145982 06-OCT-2010	4088785 17-JAN-2012	IXIA
TESTTALK	38 41	77727708 02-MAY-2009	3826165 27-JUL-2010	IXIA
IXNETWORK	9	77028282 24-OCT-2006	3278962 14-AUG-2007	IXIA
IXLOAD	9	77028244 24-OCT-2006	3354915 18-DEC-2007	IXIA
IXIA	41 42	77028237 24-OCT-2006	3828628 03-AUG-2010	IXIA
APTIXIA	9	77028295 24-OCT-2006	3397021 18-MAR-2008	IXIA
DESIGN ONLY	41 42	77028268 24-OCT-2006	3489272 19-AUG-2008	IXIA
IXCHARIOT	9	78324583 07-NOV-2003	2974112 19-JUL-2005	IXIA
VERIWAVE	9	78152276 08-AUG-2002	3068884 14-MAR-2006	IXIA
REAL WORLD TRAFFIC	9	78141014 03-JUL-2002	3248026 29-MAY-2007	IXIA
IXPROFILE	9	76375974 27-FEB-2002	3121098 25-JUL-2006	IXIA
IXEDGE	9	76375893 27-FEB-2002	3743521 02-FEB-2010	IXIA
OPTIXIA	9	76109657 15-AUG-2000	2654846 26-NOV-2002	IXIA
IXIA	9	76109658 15-AUG-2000	2616682 10-SEP-2002	IXIA
QCHECK	9	75719516 02-JUN-1999	2594810 16-JUL-2002	IXIA
DCT2000	9	75670809 29-MAR-1999	2571829 21-MAY-2002	IXIA
MGTS	9	75640369 12-FEB-1999	2449799 08-MAY-2001	IXIA
IXEXPLORER	9	75632232 02-FEB-1999	2392826 10-OCT-2000	IXIA
DESIGN ONLY	9	75630135 28-JAN-1999	2311797 25-JAN-2000	IXIA
CATAPULT COMMUNICATIONS CATAPULT COMMUNICATIONS	9 41	75452426 17-MAR-1998	2297537 07-DEC-1999	IXIA

MARK	CLASS	APP. NO./ APP. DATE	REG. NO./ REG. DATE	CURRENT OWNER
CHAMELEON	9	73690283 19-OCT-1987	1503690 13-SEP-1988	IXIA
NET OPTICS	9	78590933 18-MAR-2005	3116558 18-JUL-2006	NET OPTICS, INC.
ITAP	9	78579781 03-MAR-2005	3370247 15-JAN-2008	NET OPTICS, INC.
REGENERATION TAP	9	78529184 08-DEC-2004	3522436 21-OCT-2008	NET OPTICS, INC.
ACTIVE RESPONSE	9	78529185 08-DEC-2004	3119339 25-JUL-2006	NET OPTICS, INC.
TAP INTO YOUR NETWORK	9	76085658 10-JUL-2000	2619668 17-SEP-2002	NET OPTICS, INC.
BRIGHT IDEAS BUILT FOR SPEED	9	76085659 10-JUL-2000	2630027 08-OCT-2002	NET OPTICS, INC.
NETOPTICS Del Optics	9	76085660 10-JUL-2000	2619669 17-SEP-2002	NET OPTICS, INC.
NETOPTICS	9	76085922 10-JUL-2000	2616594 10-SEP-2002	NET OPTICS, INC.

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