

12/27/2012



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12/20/12

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

<b>1. Name of conveying party(ies)</b>  Riverbed Technology, Inc. OPNET Technologies, Inc.  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>2. Name and address of receiving party(ies)</b> Name: <u>Morgan Stanley &amp; Co. LLC</u> Internal Address: <u>4th Floor</u>  Street Address: <u>1300 Thames Street, Thames Street Wharf</u>  City: <u>Baltimore</u> State: <u>Maryland</u> Country: <u>USA</u> Zip: <u>21231</u>  Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>3. Nature of conveyance/Execution Date(s):</b> Execution Date(s) <u>December 18, 2012</u> <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input checked="" type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____	

<b>4. Application or patent number(s):</b> <input type="checkbox"/> This document is being filed together with a new application.	
A. Patent Application No.(s)  <u>11/124807; 11/124/830</u>  (Please see attached Schedule 1 for additional numbers)	B. Patent No.(s)  <u>5945933; 6266337</u>  (Please see attached Schedule 1 for additional numbers)
Additional numbers attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

<b>5. Name and address to whom correspondence concerning document should be mailed:</b> Name: <u>Thomas Fahey</u>  Internal Address: <u>National Corporate Research, Ltd.</u>  Street Address: <u>1100 G Street, N.W., Suite 420</u>  City: <u>Washington D.C.</u> State: _____ Zip: <u>20005</u>  Phone Number: <u>202-370-4761</u> Fax Number: <u>800-494-7512</u> Email Address: <u>tfahey@nationalcorp.com</u>	<b>6. Total number of applications and patents involved:</b> <u>318</u>  <b>7. Total fee (37 CFR 1.21(h) &amp; 3.41)</b> \$ <u>12,720.00</u>  <input type="checkbox"/> Authorized to be charged to deposit account <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)  <b>8. Payment information</b>  Deposit Account Number _____ 12/27/2012 HTON11 00000114 5945933 Authorized User Name _____ 01 FC:8021 _____ 12720.00 OP
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<b>9. Signature:</b> <u>Rick Harrison</u> Signature Date: <u>12/19/12</u>  Rick Harrison Name of Person Signing	Total number of pages including cover sheet, attachments, and documents: <span style="border: 1px solid black; padding: 2px;">25</span>
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Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

## PATENTS

## Issued Patents

## U.S. PATENTS REGISTRATIONS AND APPLICATIONS

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	09/013,980	5,945,933	1/27/1998	8/31/1999	Adaptive packet compression apparatus and method
Riverbed Technology, Inc.	09/103,621	6,266,337	6/23/1998	7/24/2001	PACKET RETRANSMISSION ELIMINATOR
Riverbed Technology, Inc.	09/103,621	6,266,337	6/23/1998	7/24/2001	Packet retransmission eliminator
Riverbed Technology, Inc.	09/218,953	6,121,903	12/22/1998	9/19/2000	ON-THE-FLY DATA RE-COMPRESSION
Riverbed Technology, Inc.	09/218,953	6,121,903	12/22/1998	9/19/2000	On-the-fly data re-compression
Riverbed Technology, Inc.	09/931,223	7,702,806	8/16/2001	4/20/2010	STATISTICS COLLECTION FOR NETWORK TRAFFIC
Riverbed Technology, Inc.	09/931,291	7,278,159	8/16/2001	10/2/2007	COORDINATED THWARTING OF DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/931,344	7,836,498	8/16/2001	11/16/2010	DEVICE TO PROTECT VICTIM SITES DURING DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/931,487	7,743,134	8/16/2001	6/22/2010	THWARTING SOURCE ADDRESS SPOOFING-BASED DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/931,558	7,124,440	8/16/2001	10/17/2006	MONITORING NETWORKS TRAFFIC DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/931,561	7,043,759	8/16/2001	5/9/2006	ARCHITECTURE TO THWART DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/946,787	7,398,317	9/5/2001	7/8/2008	THWARTING CONNECTION-BASED DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	10/062,974	7,213,264	1/31/2002	5/1/2007	ARCHITECTURE TO THWART DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	10/066,232	7,743,415	1/31/2002	6/22/2010	DENIAL OF SERVICE ATTACKS

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	10/066,252	7,657,934	1/31/2002	2/2/2010	CHARACTERIZATION ARCHITECTURE TO THWART DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	10/137,744	7,581,023	4/30/2002	8/25/2009	ARCHITECTURE TO THWART DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	10/285,315	7,120,666	10/30/2002	10/10/2006	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATION SYSTEMS
Riverbed Technology, Inc.	10/285,330	6,667,700	10/30/2002	12/23/2003	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	10/640,405	8,069,225	8/12/2003	11/29/2011	TRANSPARENT CLIENT-SERVER TRANSACTION ACCELERATOR
Riverbed Technology, Inc.	10/640,459	7,650,416	8/12/2003	1/19/2010	CONTENT DELIVERY FOR CLIENT-SERVER PROTOCOLS WITH USER AFFINITIES USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	10/640,459	7,650,416	8/12/2003	1/19/2010	CONTENT DELIVERY FOR CLIENT-SERVER PROTOCOLS WITH USER AFFINITIES USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	10/640,562	7,318,100	8/12/2003	1/8/2008	COOPERATIVE PROXY AUTO-DISCOVERY AND CONNECTION INTERCEPTION
Riverbed Technology, Inc.	10/701,154		11/3/2003		CONNECTION BASED ANOMALY DETECTION
Riverbed Technology, Inc.	10/701,155	7,872,272	11/3/2003	11/2/2010	CONNECTION TABLE FOR INTRUSION DETECTION
Riverbed Technology, Inc.	10/701,157	7,774,839	11/3/2003	8/10/2010	FEEDBACK MECHANISM TO MINIMIZE FALSE ASSERTIONS OF A NETWORK INTRUSION
Riverbed Technology, Inc.	10/701,346	7,949,737	11/3/2003	5/24/2011	ROLE CORRELATION
Riverbed Technology, Inc.	10/701,356		11/3/2003		AGGREGATOR FOR CONNECTION BASED ANOMALY DETECTION
Riverbed Technology, Inc.	10/701,376	7,363,656	11/3/2003	4/22/2008	EVENT DETECTION/ANOMALY

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	10/701,381	8,191,136	11/3/2003	5/29/2012	CORRELATION HEURISTICS
Riverbed Technology, Inc.	10/701,392	8,090,809	11/3/2003	1/3/2012	CONNECTION BASED DENIAL OF SERVICE DETECTION
Riverbed Technology, Inc.	10/701,400	7,461,404	11/3/2003	12/2/2008	ROLE GROUPING
Riverbed Technology, Inc.	10/701,404	7,716,737	11/3/2003	5/11/2010	DETECTION OF UNAUTHORIZED ACCESS IN A NETWORK
Riverbed Technology, Inc.	10/702,073	7,664,963	11/3/2003	2/16/2010	CONNECTION BASED DETECTION OF SCANNING ATTACKS
Riverbed Technology, Inc.	10/731,687	6828925	12/8/2003	12/7/2004	DATA COLLECTORS IN CONNECTION-BASED INTRUSION DETECTION
Riverbed Technology, Inc.	10/803,167	7,698,730	3/16/2004	4/13/2010	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	10/880,332		6/28/2004		SERVICE DETECTION
Riverbed Technology, Inc.	10/880,333	7,929,534	6/28/2004	4/19/2011	RULE BASED ALERTING IN ANOMALY DETECTION
Riverbed Technology, Inc.	10/955,450	7,706,273	9/30/2004	4/27/2010	FLOW LOGGING FOR CONNECTION-BASED ANOMALY DETECTION
Riverbed Technology, Inc.	10/957,850	7,764,626	10/4/2004	7/27/2010	PORT TRACKING ON DYNAMICALLY NEGOTIATED PORTS
Riverbed Technology, Inc.	10/968,868	6961009	10/18/2004	11/1/2005	ROLE GROUPING OF HOSTS IN COMPUTER NETWORKS
Riverbed Technology, Inc.	10/974,386	7,760,653	10/26/2004	7/20/2010	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	11/124,807		5/9/2005		STACKABLE AGGREGATION FOR CONNECTION BASED ANOMALY DETECTION
Riverbed Technology, Inc.	11/124,830		5/9/2005		RE-USING SERVER SIDE CONNECTIONS
					ISOLATED PROCESSING ENVIRONMENT

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	11/124,835	7,523,178	5/9/2005	4/21/2009	ASSUME RESPONSIBILITY ON FAILURE
Riverbed Technology, Inc.	11/145,201		6/3/2005		METHOD AND SYSTEM FOR MANAGING DATA
Riverbed Technology, Inc.	11/223,789	7116249	9/8/2005	10/3/2006	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	11/229,016	7428573	9/15/2005	9/23/2008	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATION SYSTEMS
Riverbed Technology, Inc.	11/242,540		10/3/2005		Peer signaling protocol and system for decentralized traffic management
Riverbed Technology, Inc.	11/243,068		10/3/2005		RELIABILITY AND AVAILABILITY OF DISTRIBUTED SERVERS
Riverbed Technology, Inc.	11/273,861	7853699	11/14/2005	12/14/2010	RULES-BASED TRANSACTION PREFETCHING USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	11/377,906		3/15/2006		CONNECTION FORWARDING
Riverbed Technology, Inc.	11/387,087		3/21/2006		EMAIL-BASED WORM PROPAGATION PROPERTIES
Riverbed Technology, Inc.	11/387,092		3/21/2006		WORM PROPAGATION MITIGATION
Riverbed Technology, Inc.	11/387,114	8,006,306	3/21/2006	8/23/2011	EXPLOIT-BASED WORM PROPAGATION MITIGATION
Riverbed Technology, Inc.	11/489,414		7/18/2006		SPLIT TERMINATION FOR SECURE COMMUNICATION PROTOCOLS
Riverbed Technology, Inc.	11/494,025		7/26/2006		CONGESTION MANAGEMENT OVER LOSSY NETWORK CONNECTIONS
Riverbed Technology, Inc.	11/494,352		7/26/2006		SERIAL CLUSTERING
Riverbed Technology, Inc.	11/494,364	8204058	7/26/2006	6/19/2012	AUTOMATIC FRAMING SELECTION
Riverbed Technology, Inc.	11/508,531	7477166	8/22/2006	1/13/2009	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	11/618,190	7733910	12/29/2006	6/8/2010	DATA SEGMENTATION USING

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	11/683,325		3/7/2007		SHIFT-VARYING PREDICATE FUNCTION FINGERPRINTING
Riverbed Technology, Inc.	11/754,940		5/29/2007		ADDRESS MANIPULATION FOR NETWORK TRANSPARENCY AND TROUBLESHOOTING
Riverbed Technology, Inc.	11/755,692	7769834	5/30/2007	8/3/2010	THROTTLING OF PREDICTIVE ACKS IN AN ACCELERATED NETWORK COMMUNICATION SYSTEM
Riverbed Technology, Inc.	11/756,584	7480240	5/31/2007	1/20/2009	A SYSTEM FOR SELECTING A PROXY PAIR BASED ON CONFIGURATIONS OF AUTODISCOVERED PROXIES ON A NETWORK
Riverbed Technology, Inc.	11/762,688		6/13/2007		SERVICE CURVE MAPPING
Riverbed Technology, Inc.	12/044,861		3/7/2008		COOPERATIVE OPERATION OF NETWORK TRANSPORT AND NETWORK QUALITY OF SERVICE MODULES
Riverbed Technology, Inc.	12/106,272		4/19/2008		METHOD AND APPARATUS FOR ACCELERATION BY PREFETCHING ASSOCIATED OBJECTS
Riverbed Technology, Inc.	12/117,629		5/8/2008		EVENT DETECTION/ANOMALY CORRELATION HEURISTICS
Riverbed Technology, Inc.	12/135,114		6/6/2008		A HYBRID SEGMENT-ORIENTED FILE SERVER AND WAN ACCELERATOR
Riverbed Technology, Inc.	12/140,184		6/16/2008		COOPERATIVE PROXY AUTO-DISCOVERY AND CONNECTION INTERCEPTION
Riverbed Technology, Inc.	12/191,514	8176186	8/14/2008	5/8/2012	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATIONS SYSTEMS
Riverbed Technology, Inc.	12/191,805	7849134	8/14/2008	12/7/2010	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATION SYSTEMS
Riverbed Technology, Inc.	12/210,087	7839781	9/12/2008	11/23/2010	SERVICE CURVE MAPPING
Riverbed Technology, Inc.	12/235,325	8,266,114	9/22/2008	9/11/2012	LOG STRUCTURED CONTENT

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	12/235,548		9/22/2008		ADDRESSABLE DEDUPLICATING STORAGE
Riverbed Technology, Inc.	12/266,054		11/6/2008		STORAGE SYSTEM FOR DATA VIRTUALIZATION AND DEDUPLICATION
Riverbed Technology, Inc.	12/266,081		11/6/2008		USER INTERFACE FOR NETWORK EVENTS AND TUNING
Riverbed Technology, Inc.	12/266,105		11/6/2008		IMPACT SCORING AND REDUCING FALSE POSITIVES
Riverbed Technology, Inc.	12/280,760		10/24/2008		DETECTING OUTLIERS IN NETWORK TRAFFIC TIME SERIES
Riverbed Technology, Inc.	12/296,062		11/6/2008		METHOD FOR PROVIDING WEB APPLICATION SECURITY
Riverbed Technology, Inc.	12/327,681		12/3/2008		SERVER CONFIGURATION SELECTION FOR SSL INTERCEPTION
Riverbed Technology, Inc.	12/327,693		12/3/2008		REDUCING LATENCY OF SPLIT-TERMINATED SECURE COMMUNICATION PROTOCOL SESSIONS
Riverbed Technology, Inc.	12/327,766		12/3/2008		TRANSACTION ACCELERATION USING APPLICATION-SPECIFIC LOCKING
Riverbed Technology, Inc.	12/330,197	7852237	12/8/2008	12/14/2010	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	12/331,257	8140690	12/9/2008	3/20/2012	CONNECTION FORWARDING INTERCEPTING AND SPLIT-TERMINATING AUTHENTICATED COMMUNICATION CONNECTIONS
Riverbed Technology, Inc.	12/352,959		1/13/2009		COOPERATIVE PROXY AUTO-DISCOVERY AND CONNECTION INTERCEPTION
Riverbed Technology, Inc.	12/391,967	7953869	2/24/2009	5/31/2011	SPLIT TERMINATION OF SECURE COMMUNICATION SESSIONS WITH
Riverbed Technology, Inc.	12/396,904		3/3/2009		

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	12/398,898	7,984,160	3/5/2009	7/19/2011	MUTUAL CERTIFICATE-BASED AUTHENTICATION
Riverbed Technology, Inc.	12/416,057		3/31/2009		ESTABLISHING A SPLIT-TERMINATED COMMUNICATION CONNECTION THROUGH A STATEFUL FIREWALL WITH NETWORK TRANSPARENCY
Riverbed Technology, Inc.	12/416,067		3/31/2009		VIRTUAL FILE SYSTEM STACK FOR DATA DEDUPLICATION
Riverbed Technology, Inc.	12/425,513		4/17/2009		LOG STRUCTURED CONTENT ADDRESSABLE DEDUPLICATING STORAGE
Riverbed Technology, Inc.	12/495,815		7/1/2009		CALL TO EXTERNAL PROCESS
Riverbed Technology, Inc.	12/496,405		7/1/2009		DEFINING NETWORK TRAFFIC PROCESSING FLOWS BETWEEN VIRTUAL MACHINES
Riverbed Technology, Inc.	12/496,430		7/1/2009		NETWORK TRAFFIC PROCESSING PIPELINE FOR VIRTUAL MACHINES IN A NETWORK DEVICE
Riverbed Technology, Inc.	12/496,466		7/1/2009		EXTENDED NETWORK PROTOCOLS FOR COMMUNICATION METADATA WITH VIRTUAL MACHINES
Riverbed Technology, Inc.	12/496,484		7/1/2009		MAINTAINING VIRTUAL MACHINES IN A NETWORK DEVICE
Riverbed Technology, Inc.	12/502,983		7/14/2009		METHODS AND SYSTEMS FOR SECURE COMMUNICATIONS USING A LOCAL CERTIFICATION AUTHORITY
Riverbed Technology, Inc.	12/511,248		7/29/2009		
Riverbed Technology, Inc.	12/554,113		9/4/2009		OVERLOAD BANDWIDTH REDUCTION
Riverbed Technology, Inc.	12/571,430	8,180,902	9/30/2009	5/15/2012	ESTABLISHING NETWORK CONNECTIONS BETWEEN TRANSPARENT NETWORK DEVICES



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Riverbed Technology, Inc.	12/571,433	8,181,060	9/30/2009	5/15/2012	PREVENTING DATA CORRUPTION WITH TRANSPARENT NETWORK CONNECTIONS
Riverbed Technology, Inc.	12/615,340		11/10/2009		TRAFFIC MANAGEMENT APPARATUS
Riverbed Technology, Inc.	12/632,703		12/7/2009		CONTENT DELIVERY FOR CLIENT SERVER PROTOCOLS WITH USER AFFINITIES USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	12/649,627		12/30/2009		
Riverbed Technology, Inc.	12/729,127		3/22/2010		
Riverbed Technology, Inc.	12/730,179		3/23/2010		VIRTUALIZED DATA STORAGE OVER WIDE-AREA NETWORKS
Riverbed Technology, Inc.	12/730,185		3/23/2010		VIRTUALIZED DATA STORAGE SYSTEM ARCHITECTURE
Riverbed Technology, Inc.	12/730,192		3/23/2010		VIRTUALIZED DATA STORAGE SYSTEM CACHE MANAGEMENT
Riverbed Technology, Inc.	12/730,198		3/23/2010		VIRTUALIZED DATA STORAGE SYSTEM OPTIMIZATIONS
Riverbed Technology, Inc.	12/818,872		6/18/2010		VIRTUALIZED DATA STORAGE APPLICATIONS AND OPTIMIZATIONS
Riverbed Technology, Inc.	12/825,296		6/28/2010		SELECTING PROXIES FROM AMONG AUTODISCOVERED PROXIES
Riverbed Technology, Inc.	12/826,430		6/29/2010		METHOD AND APPARATUS FOR SPLIT-TERMINATING A SECURE NETWORK CONNECTION, WITH CLIENT AUTHENTICATION
Riverbed Technology, Inc.	12/843,754		7/26/2010		INTERCEPTION OF A CLOUD-BASED COMMUNICATION CONNECTION
Riverbed Technology, Inc.	12/853,729		8/10/2010		MANAGING CLIENT REQUESTS FOR DATA
Riverbed Technology, Inc.	12/878,992		9/9/2010		
Riverbed Technology, Inc.	12/893,894		9/29/2010		SYSTEM AND METHOD FOR WARMING AN OPTIMIZATION

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Riverbed Technology, Inc.	12/894,681		9/30/2010		DEVICE
Riverbed Technology, Inc.	12/895,811		9/30/2010		RULES-BASED TRANSACTIONS PREFETCHING USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	12/895,835		9/30/2010		CLOUD SYNTHETIC BACKUPS
Riverbed Technology, Inc.	12/902,964		10/12/2010		CLOUD-BASED DISASTER RECOVERY OF BACKUP DATA AND METADATA
Riverbed Technology, Inc.	12/903,975		10/13/2010		SERVICE CURVE MAPPING
Riverbed Technology, Inc.	12/916,112	8271688	10/29/2010	9/18/2012	METHOD OF IMPROVING PERFORMANCE OF A DATA STORAGE DEVICE
Riverbed Technology, Inc.	12/940,017		11/4/2010		TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATIONS SYSTEMS
Riverbed Technology, Inc.	12/942,988		11/9/2010		CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	12/942,991		11/9/2010		DISASTER RECOVERY USING LOCAL AND CLOUD SPANNING DEDUPLICATED STORAGE SYSTEM
Riverbed Technology, Inc.	12/978,056		12/23/2010		WAN-OPTIMIZED LOCAL AND CLOUD SPANNING DEDUPLICATED STORAGE SYSTEM
Riverbed Technology, Inc.	12637476	7,886,218	12/14/2009	2/8/2011	VIRTUAL DATA STORAGE DEVICES AND APPLICATIONS OVER WIDE AREA NETWORKS
Riverbed Technology, Inc.	13/070,064		3/23/2011		METHODS AND DEVICES FOR POST PROCESSING RENDERED WEB PAGES HANDLING REQUESTS OF POST PROCESSED WEB PAGES
Riverbed Technology, Inc.	13/070,089		3/23/2011		
Riverbed Technology, Inc.	13/074,602		3/29/2011		
Riverbed Technology, Inc.	13/074,923		3/29/2011		

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Riverbed Technology, Inc.	13/082,186	8316118	4/7/2011	11/20/2012	COOPERATIVE PROXY AUTO-DISCOVERY AND CONNECTION INTERCEPTION
Riverbed Technology, Inc.	13/115,692		5/25/2011		APPARATUS FOR ROUTING REQUESTS
Riverbed Technology, Inc.	13/152,152	8,255,544	6/2/2011	8/28/2012	ESTABLISHING A SPLIT-TERMINATED COMMUNICATION CONNECTION THROUGH A STATEFUL FIREWALL, WITH NETWORK TRANSPARENCY
Riverbed Technology, Inc.	13/166,321		6/22/2011		BOOTING DEVICES USING VIRTUAL STORAGE ARRAYS OVER WIDE-AREA NETWORKS
Riverbed Technology, Inc.	13/170,063		6/27/2011		
Riverbed Technology, Inc.	13/218,504		8/26/2011		MONITORING CONNECTIONS
Riverbed Technology, Inc.	13/249,177		9/29/2011		
Riverbed Technology, Inc.	13/249,183		9/29/2011		
Riverbed Technology, Inc.	13/249,195		9/29/2011		
Riverbed Technology, Inc.	13/249,201		9/29/2011		
Riverbed Technology, Inc.	13/250,200		9/30/2011		
Riverbed Technology, Inc.	13/251,148	8312101	9/30/2011	11/13/2012	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATIONS SYSTEMS
Riverbed Technology, Inc.	13/282,393		10/26/2011		
Riverbed Technology, Inc.	13/315,619		12/9/2011		
Riverbed Technology, Inc.	13/341,825		12/30/2011		
Riverbed Technology, Inc.	13/410,032		3/1/2012		CONNECTION FORWARDING
Riverbed Technology, Inc.	13/410,689		3/2/2012		
Riverbed Technology, Inc.	13/415,815		3/8/2012		
Riverbed Technology, Inc.	13/415,819		3/8/2012		
Riverbed Technology, Inc.	13/415,821		3/8/2012		
Riverbed Technology, Inc.	13/415,823		3/8/2012		
Riverbed Technology, Inc.	13/436,873		3/31/2012		

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Riverbed Technology, Inc.	13/436,874		3/31/2012		
Riverbed Technology, Inc.	13/441,681		4/6/2012		TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATIONS SYSTEMS
Riverbed Technology, Inc.	13/453,731		4/23/2012		
Riverbed Technology, Inc.	13/459,065	8321580	4/27/2012	11/27/2012	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATION SYSTEMS
Riverbed Technology, Inc.	13/460,392		4/30/2012		ESTABLISHING NETWORK CONNECTIONS BETWEEN TRANSPARENT NETWORK DEVICES
Riverbed Technology, Inc.	13/464,713		5/4/2012		
Riverbed Technology, Inc.	13/464,714		5/4/2012		
Riverbed Technology, Inc.	13/471,956		5/15/2012		
Riverbed Technology, Inc.	13/491,501		6/7/2012		
Riverbed Technology, Inc.	13/530,740		6/22/2012		
Riverbed Technology, Inc.	13/536,770		6/28/2012		
Riverbed Technology, Inc.	13/589,896		8/20/2012		
Riverbed Technology, Inc.	13/650,354		10/12/2012		
Riverbed Technology, Inc.	13/670,753		11/7/2012		
Riverbed Technology, Inc.	61/494,390		6/7/2011		
Riverbed Technology, Inc.	61/502,856		6/29/2011		
Riverbed Technology, Inc.	61/503,487		6/30/2011		
Riverbed Technology, Inc.	61/606,893		3/5/2012		
Riverbed Technology, Inc.	61/699,730		9/11/2012		
Riverbed Technology, Inc.	61/730,392		11/27/2012		
Riverbed Technology, Inc.	95/002,308		9/14/2012		Transaction Accelerator for Client-Server Communications Systems
Riverbed Technology, Inc.	95/002,310		9/14/2012		Transaction Accelerator for Client-Server Communications Systems
Riverbed Technology, Inc.	PCT/US2009/004084		7/14/2009		
Riverbed Technology, Inc.	PCT/US2011/030776		3/31/2011		
Riverbed Technology, Inc.	PCT/US2012/28382		3/8/2012		ACCESSING NETWORK TRAFFIC DATA AT MULTIPLE TIME SCALES

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
AND LEVELS OF DETAIL					

Owner	Application No.	Application Date	Patent/ Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	09/151,748	11.09.1998	6,240,416	29.05.2001	DISTRIBUTED METADATA SYSTEM AND METHOD
OPNET Technologies, Inc.	09/108,503	01.07.1998	6,278,963	21.08.2001	SYSTEM ARCHITECTURE FOR DISTRIBUTION OF DISCRETE-EVENT SIMULATIONS
OPNET Technologies, Inc.	09/345,249	30.06.1999	6,600,752	29.07.2003	METHOD FOR REDUCING EXCESS QUEUE TIME IN COMMUNICATION NODES
OPNET Technologies, Inc.	10/186,401	01.07.2002	6,643,613	04.11.2003	SYSTEM AND METHOD FOR MONITORING PERFORMANCE METRICS
OPNET Technologies, Inc.	09/539,434	30.03.2000	6,674,717	06.01.2004	METHOD FOR REDUCING PACKET LOSS AND INCREASING INTERNET FLOW BY FEEDBACK CONTROL
OPNET Technologies, Inc.	09/624,092	24.07.2000	6,820,042	16.11.2004	MIXED MODE NETWORK SIMULATOR
OPNET Technologies, Inc.	09/682,324	20.08.2001	6,823,382	23.11.2004	MONITORING AND CONTROL ENGINE FOR MULTI-TIERED SERVICE-LEVEL MANAGEMENT OF DISTRIBUTED WEB-APPLICATION SERVERS
OPNET Technologies, Inc.	10/205,101	23.07.2002	6,928,472	09.08.2005	METHOD FOR CORRELATING CONGESTION TO PERFORMANCE METRICS IN INTERNET TRAFFIC
OPNET Technologies, Inc.	09/846,449	30.04.2001	6,947,381	20.09.2005	METHOD FOR REDUCING PACKET LOSS BY PHASE TRANSITION IDENTIFICATION IN COMMUNICATION NETWORKS
OPNET Technologies, Inc.	09/879,838	21.06.2001	6,968,540	22.11.2005	SOFTWARE INSTRUMENTATION METHOD AND APPARATUS
OPNET Technologies, Inc.	09/846,174	30.04.2001	6,990,071	24.01.2006	METHOD FOR REDUCING FETCH TIME IN A CONGESTED COMMUNICATION NETWORK
OPNET Technologies, Inc.	09/846,450	30.04.2001	7,072,297	04.07.2006	METHOD FOR DYNAMICAL IDENTIFICATION OF NETWORK CONGESTION CHARACTERISTICS
OPNET Technologies, Inc.	10/198,689	18.07.2002	7,076,695	11.07.2006	SYSTEM AND METHODS FOR ADAPTIVE THRESHOLD DETERMINATION FOR PERFORMANCE METRICS

Owner	Application No.	Application Date	Patent/ Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	10/325,148	20.12.2002	7,139,692	21.11.2006	FLOW PROPAGATION ANALYSIS USING ITERATIVE SIGNALING
OPNET Technologies, Inc.	10/243,534	13.09.2002	7,219,034	15.05.2007	SYSTEM AND METHODS FOR DISPLAY OF TIME-SERIES DATA DISTRIBUTION
					SIMULATION WITH CONVERGENCE-DETECTION
OPNET Technologies, Inc.	10/112,179	28.03.2002	7,219,047	15.05.2007	SKIP-AHEAD
OPNET Technologies, Inc.	09/854,321	11.05.2001	7,248,564	24.07.2007	METHOD FOR DETERMINING NETWORK CONGESTION AND LINK CAPACITIES
OPNET Technologies, Inc.	10/821,558	09.04.2004	7,254,389	07.08.2007	WIRELESS LINK SIMULATION WITH GENERIC CACHING
OPNET Technologies, Inc.	10/195,905	15.07.2002	7,277,843	02.10.2007	METHOD FOR REAL-TIME AUTO-DETECTION OF OUTLIERS
OPNET Technologies, Inc.	09/846,452	30.04.2001	7,333,431	19.02.2008	METHOD FOR ACCELERATING TCP FLOWS IN COMMUNICATION NETWORKS WITH DYNAMIC CONTROL
OPNET Technologies, Inc.	10/195,904	15.07.2002	7,337,206	26.02.2008	METHOD FOR DETECTING CONGESTION IN INTERNET TRAFFIC
OPNET Technologies, Inc.	10/923,576	20.08.2004	7,443,870	28.10.2008	METHOD FOR PRIORITIZING GROUPED DATA REDUCTION
OPNET Technologies, Inc.	11/832,319	01.08.2007	7,444,263	28.10.2008	PERFORMANCE METRIC COLLECTION AND AUTOMATED ANALYSIS
OPNET Technologies, Inc.	10/923,214	20.08.2004	7,469,203	23.12.2008	WIRELESS NETWORK HYBRID SIMULATION
OPNET Technologies, Inc.	10/205,135	23.07.2002	7,509,229	24.03.2009	BAYESIAN APPROACH TO CORRELATING CONGESTION TO PERFORMANCE METRICS IN INTERNET TRAFFIC
OPNET Technologies, Inc.	11/061,978	18.02.2005	7,519,700	14.04.2009	Method and System for Topological Navigation of Hierarchical Data Groups
OPNET Technologies, Inc.	09/846,451	30.04.2001	7,551,560	23.06.2009	Method of Reducing Packet Loss by Resonance Identification in Communication Networks
OPNET Technologies, Inc.	10/914,603	09.08.2004	7,570,669	04.08.2009	Synchronizing Packet Traces

Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	11/173,758	30.06.2005	7,593,351	22.09.2009	Method and System for Collecting and Consolidating Network Traffic Information
OPNET Technologies, Inc.	11/778,053	15.07.2007	7,639,609	29.12.2009	Controlled Incremental Multi-Protocol Label Switching (MPLS) Traffic Engineering
OPNET Technologies, Inc.	11/835,130	07.08.2007	7,672,238	02.03.2010	Mapping Off-Network Traffic to an Administered Network
OPNET Technologies, Inc.	11/494,692	27.07.2006	7,688,743	30.03.2010	Tracing Routing Differences
OPNET Technologies, Inc.	11/503,553	11.08.2006	7,693,699	06.04.2010	Incremental Update of Virtual Devices in a Modeled Network
OPNET Technologies, Inc.	11/173,752	30.06.2005	7,729,240	01.06.2010	Method and System for Identifying Duplicate Packets in Flow-Based Network Monitoring System
OPNET Technologies, Inc.	11/180,879	13.07.2005	7,729,256	01.06.2010	Correlating Packets
OPNET Technologies, Inc.	11/506,665	18.08.2006	7,730,099	01.06.2010	Storage and Retrieval of Richly Typed Hierarchical Network Models
OPNET Technologies, Inc.	12/098,436	06.04.2008	7,813,281	12.10.2010	Interactive MPLS Traffic Engineering
OPNET Technologies, Inc.	11/776,736	12.07.2007	7,839,790	23.11.2010	Network Congestion Analysis
OPNET Technologies, Inc.	11/752,283	22.05.2007	7,843,815	30.11.2010	Estimation of Time-Varying Latency Based on Network Trace Information
OPNET Technologies, Inc.	12/195,393	20.08.2008	7,843,840	30.11.2010	Traffic Independent Survivability Analysis
OPNET Technologies, Inc.	11/875,900	20.10.2007	7,844,423	30.11.2010	Modeling and Simulating Wireless MAC Protocols
OPNET Technologies, Inc.	10/845,517	14.05.2004	7,848,259	07.12.2010	System and Methods for Inferring Services on a Network
OPNET Technologies, Inc.	11/397,359	04.04.2006	7,885,200	08.02.2011	Application Delay Analysis
OPNET Technologies, Inc.	12/397,356	04.03.2009	7,885,206	08.02.2011	Method and System for Topological Navigation of Hierarchical Data Groups
OPNET Technologies, Inc.	11/779,429	18.07.2007	7,889,641	15.02.2011	Path Flow Formulation for Fast Reroute Bypass Tunnels in MPLS
OPNET Technologies, Inc.	11/506,648	18.08.2006	7,894,369	22.02.2011	Network Physical Connection Inference for IP Tunnels



Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	12/478,775	05.06.2009	8,005,006	23.08.2011	Discovery of Multiple-Parent Dependencies in Network Performance Analysis
OPNET Technologies, Inc.	11/125,562	10.05.2005	8,005,019	23.08.2011	Fuzzy Routing
OPNET Technologies, Inc.	11/735,474	15.04.2007	8,005,945	23.08.2011	Aggregating Policy Criteria Parameters into Ranges for Efficient Network Analysis
OPNET Technologies, Inc.	10/903,585	02.08.2004	8,010,643	30.08.2011	System and Methods for Simulating Traffic Generation
OPNET Technologies, Inc.	11/829,925	29.07.2007	8,089,904	03.01.2012	Link Inference in Large Networks Based on Incomplete Data
OPNET Technologies, Inc.	11/755,089	30.05.2007	8,095,645	10.01.2012	Traffic Flow Inference Based on Link Loads and Gravity Measures
OPNET Technologies, Inc.	12/060,271	01.04.2008	8,095,649	10.01.2012	Network Delay Analysis Including Parallel Delay Effects
OPNET Technologies, Inc.	10/903,586	02.08.2004	8,130,661	06.03.2012	Systems and Methods for Intelligent Probe Testing
OPNET Technologies, Inc.	11/494,441	27.07.2006	8,130,759	06.03.2012	Routing Validation
OPNET Technologies, Inc.	11/834,058	06.08.2007	8,135,990	13.03.2012	Multi-Variate Network Survivability Analysis
OPNET Technologies, Inc.	11/507,114	19.08.2006	8,140,665	20.03.2012	Managing Captured Network Traffic Data
OPNET Technologies, Inc.	12/498,786	07.07.2009	8,144,627	27.03.2012	Inferring Connectivity in the Presence of Conflicting Network Data
OPNET Technologies, Inc.	11/844,765	24.08.2007	8,159,971	17.04.2012	System and Method for Inferring Connectivity Among Network Segments in the Absence of Configuration Information
OPNET Technologies, Inc.	12/192,103	14.08.2008	8,165,038	24.04.2012	Network Physical Connection Inference for IP Tunnels
OPNET Technologies, Inc.	12/176,317	18.07.2008	8,166,004	24.04.2012	Verifying Data Consistency Among Multiple Structured Files
OPNET Technologies, Inc.	11/358,536	21.02.2006	8,195,443	05.06.2012	Predictive Modeling and Graphical Editing of Application Logic
OPNET Technologies, Inc.	11/832,923	02.08.2007	8,195,736	05.06.2012	Mapping Virtual Internet Protocol Addresses

Owner	Application No.	Application Date	Patent/ Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	12/143,799	22.06.2008	8,228,804	24.07.2012	Tuning Routing Metrics to Reduce Maximum Link Utilization and/or Provide Failure Resiliency
OPNET Technologies, Inc.	11/503,554	11.08.2006	8,230,491	24.07.2012	Automatic Access to Network Devices Using Various Authentication Schemes
OPNET Technologies, Inc.	11/501,388	09.08.2006	8,249,094	21.08.2012	Wireless MAC and Link-Layer Simulation Modeling
OPNET Technologies, Inc.	12/196,044	21.08.2008	8,255,906	28.08.2012	Modeling Overhead for a Plurality of Virtualization Technologies in a Computer System
OPNET Technologies, Inc.	12/861,832	24.08.2010	8,296,424	23.10.2012	Network Capacity Planning
OPNET Technologies, Inc.	61/611,781	16.03.2012			
OPNET Technologies, Inc.	61/588,357	19.01.2012			
OPNET Technologies, Inc.	61/576,172	15.12.2011			
OPNET Technologies, Inc.	61/568,678	09.12.2011			
OPNET Technologies, Inc.	61/559,923	15.11.2011			
OPNET Technologies, Inc.	61/559,917	15.11.2011			
OPNET Technologies, Inc.	13/654,859	18.10.2012			
OPNET Technologies, Inc.	13/657,541	22.10.2012			
OPNET Technologies, Inc.	13/645,688	05.10.2012			
OPNET Technologies, Inc.	13/595,372	27.08.2012			
OPNET Technologies, Inc.	13/590,088	20.08.2012			
OPNET Technologies, Inc.	13/570,572	09.08.2012			
OPNET Technologies, Inc.	13/568,988	07.08.2012			
OPNET Technologies, Inc.	13/556,178	23.07.2012			
OPNET Technologies, Inc.	13/556,174	23.07.2012			
OPNET Technologies, Inc.	13/487,895	04.06.2012			
OPNET Technologies, Inc.	13/487,863	04.06.2012	2012/0246307	27.09.2012	Mapping Virtual Internet Protocol Addresses
OPNET Technologies, Inc.	13/454,050	23.04.2012	2012/0209867	16.08.2012	Verifying Data Consistency Among Multiple Structured Files
OPNET Technologies, Inc.	13/454,034	23.04.2012	2012/0207058	16.08.2012	Network Physical Connection Inference for IP

Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
					Tunnels
OPNET Technologies, Inc.	13/448,389	16.04.2012	2012/0201168	09.08.2012	System and Method for Inferring Connectivity Among Network Segments in the Absence of Configuration Information
OPNET Technologies, Inc.	13/444,583	11.04.2012			
OPNET Technologies, Inc.	13/430,541	26.03.2012	2012/0182903	19.07.2012	Inferring Connectivity in the Presence of Conflicting Network Data
OPNET Technologies, Inc.	13/424,005	19.03.2012	2012/0179816	12.07.2012	Managing Captured Network Traffic Data
OPNET Technologies, Inc.	13/412,623	06.03.2012			
OPNET Technologies, Inc.	13/412,615	06.03.2012	2012/0163227	28.06.2012	Systems and Methods for Intelligent Probe Testing
OPNET Technologies, Inc.	13/412,604	05.03.2012	2012/0163197	28-06-2012	Routing Validation Methods and Systems Based on Simulating Route Convergence
OPNET Technologies, Inc.	13/400,973	21.02.2012			
OPNET Technologies, Inc.	13/365,496	03.02.2012			
OPNET Technologies, Inc.	13/365,484	03.02.2012	2012/0246287	27.09.2012	Correlating Input and Output Requests between Client and Server Components in a Multi-Tier Application
OPNET Technologies, Inc.	13/346,453	09.01.2012	2012/0179813	12.07.2012	Traffic Flow Inference Based on Link Loads and Gravity Measures
OPNET Technologies, Inc.	13/333,955	09.05.2007			
OPNET Technologies, Inc.	13/301,688	11.21.2011			
OPNET Technologies, Inc.	13/210,351	15.08.2011	2012/0207161	16.08.2012	Network Path Discovery and Analysis
OPNET Technologies, Inc.	13/186,776	20.07.2011	2011/0276887	10.11.2011	Organizing, Displaying, and Manipulating Network Traffic Data
OPNET Technologies, Inc.	13/165,728	21.06.2011	2011/0252136	13.10.2011	Fuzzy Routing
OPNET Technologies, Inc.	13/165,589	21.06.2011	2011/0320242	29-12-2011	Multi-Variate Sales Performance Analysis System
OPNET Technologies, Inc.	13/117,105	26.05.2011	2011/0296012	01.12.2011	Multi-Tier Message Correlation
OPNET Technologies, Inc.	13/021,709	04.02.2011	2011/0197191	11.08.2011	Correcting Packet Timestamps in Virtualized Environments

Owner	Application No.	Application Date	Patent/ Publication No.	Registration Publication Date	Title
OPNET Technologies, Inc.	12/963,481	08.12.2010	2011/0145715	16.06.2011	Web Transaction Analysis
OPNET Technologies, Inc.	12/907,225	19.10.2010	2011/0040864	17.02.2011	System and Methods for Inferring Services on a Network
OPNET Technologies, Inc.	12/900,357	07.10.2010	2011/0085450	14.04.2011	Network Path Discovery and Analysis
OPNET Technologies, Inc.	12/900,348	07.10.2010	2011/0085449	14.04.2011	Network Path Discovery and Analysis
OPNET Technologies, Inc.	12/705,570	13.02.2010	2010/0211754	19.08.2010	Memory Utilization Analysis
OPNET Technologies, Inc.	12/652,499	05.01.2010	2010/0138688	03.06.2010	Managing Service Levels on a Shared Network
OPNET Technologies, Inc.	12/623,592	23.11.2009	2010/0128623	27.05.2010	End-to-End Analysis of Transactions in Networks with Traffic-Altering Devices
OPNET Technologies, Inc.	12/544,317	20.08.2009	2010/0046395	25.02.2010	Incremental and Targeted Auto-Discovery of Network Device
OPNET Technologies, Inc.	12/435,932	05.05.2009	2009/0279496	12.11.2009	Dedicated and Priority Based Allocation in Multi-Hop Wireless Systems
OPNET Technologies, Inc.	12/176,325	18.07.2008	2009/0055802	26.02.2009	Selective Monitoring of Software Applications
OPNET Technologies, Inc.	12/023,026	30.01.2008	2008/0189353	07.08.2008	System and Methods for Inferring Services on a Network
OPNET Technologies, Inc.	11/941,186	16.11.2007	2008/0120081	22.05.2008	Modeling and Simulating Flow Propagation in Dynamic Bandwidth Systems
OPNET Technologies, Inc.	11/838,417	14.08.2007	2008/0043627	21.02.2008	Network Simulation and Analysis Using Operational Forwarding Data
OPNET Technologies, Inc.	11/776,721	12.07.2007	2008/0022357	24.01.2008	Assessing Network and Device Compliance with Security Policies
OPNET Technologies, Inc.	11/776,708	12.07.2007	2008/0016056	17.01.2008	Identifying and Reporting Differences in Network Activity Data Files
OPNET Technologies, Inc.	11/678,595	24.02.2007	2007/0214206	13.09.2007	User-Configurable Network Performance Monitors
OPNET Technologies, Inc.	11/506,651	18.08.2006	2007/0097883	03.05.2007	Generation of a Network Topology Hierarchy
OPNET Technologies, Inc.	11/506,650	18.08.2006	2007/0043547	22.02.2007	Integrated Debugging Environment for a Network Simulation
OPNET Technologies, Inc.	11/505,228	16.08.2006	2007/0058570	15.03.2007	A Method for Identifying and Analyzing Network Configuration Differences

Owner	Application No.	Application Date	Patent/ Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	11/505,176	16.08.2006	2007/0043861	22.02.2007	Capture, Analysis, and Visualization of Concurrent System and Network Behavior of an Application
OPNET Technologies, Inc.	11/505,171	16.08.2006	2007/0157286	05.07.2007	Analyzing Security Compliance Within a Network Visualizing a Complex Network Based on a Set of Objects of Interest
OPNET Technologies, Inc.	11/503,555	11.08.2006	2007/0044032	22.02.2007	Disparate Network Model Synchronization
OPNET Technologies, Inc.	11/501,389	09.08.2006	2007/0043752	22.02.2007	Automatic Estimation of Node Location Based on Trace Information
OPNET Technologies, Inc.	11/490,586	21.07.2006	2007/0041335	22.02.2007	Tracking, Analyzing, and Visualizing Application Delay
OPNET Technologies, Inc.	11/358,538	21.02.2006	2006/0190231	24.08.2006	Network Difference Reporting
OPNET Technologies, Inc.	11/180,888	13.07.2005	2006/0015604	19.01.2006	Packet Tracing
OPNET Technologies, Inc.	11/180,878	13.07.2005	2006/0013228	19.01.2006	Method and System for Managing a Distributed Network of Network Monitoring Devices
OPNET Technologies, Inc.	11/092,226	28.03.2005	2006/0253566	09.11.2006	Method for Discovery and Troubleshooting of Network Application Usage and Performance Issues
OPNET Technologies, Inc.	11/001,985	01.12.2004	2006/0075094	06.04.2006	Method and System for Grouping Diagnostic Information
OPNET Technologies, Inc.	10/937,986	10.09.2004	2006/0069768	30.03.2006	Division of Data Structures for Efficient Simulation
OPNET Technologies, Inc.	10/914,602	09.08.2004	2005/0047440	03.03.2005	System for Automatic Import, Analysis, and Reporting of Network Configuration and Status Information
OPNET Technologies, Inc.	10/912,704	05.08.2004	2005/0044215	24.02.2005	

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT, dated as of December 18, 2012 ("Patent Security Agreement"), made by RIVERBED TECHNOLOGY, INC., a Delaware corporation, and OPNET TECHNOLOGIES, INC., a Delaware corporation (the "Grantors"), is in favor of MORGAN STANLEY & CO. LLC, a Delaware limited liability company, as collateral agent (in such capacity, the "Collateral Agent") for the Secured Parties.

WITNESSETH:

WHEREAS, the Grantors are party to a Guarantee and Collateral Agreement dated as of December 18, 2012 (the "Guarantee and Collateral Agreement") in favor of the Collateral Agent and MORGAN STANLEY SENIOR FUNDING, INC., as administrative agent (in such capacity, the "Administrative Agent") pursuant to which the Grantors are required to execute and deliver this Patent Security Agreement (capitalized terms used but not otherwise defined herein shall have the meanings given to them in the Guarantee and Collateral Agreement);

WHEREAS, pursuant to the terms of the Guarantee and Collateral Agreement, each Grantor has created in favor of the Collateral Agent a security interest in the Patent Collateral (as defined below);

NOW, THEREFORE, in consideration of the premises and to induce the Agents and the Lenders to enter into the Credit Agreement and to induce Lenders to make their respective extensions of credit to the Borrower thereunder and to induce the Qualified Counterparties to enter into the Specified Hedge Agreements and provide financial accommodation, each Grantor hereby agrees with the Collateral Agent, for the benefit of the Secured Parties, as follows:

Each Grantor hereby grants to the Collateral Agent, for the benefit of the Secured Parties, a security interest in all of the following property now owned or at any time hereafter acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the "Patent Collateral"), as collateral security for the complete payment and performance when due (whether at the stated maturity, by acceleration or otherwise) of all Secured Obligations:

- (a) the registered and applied-for Patents of such Grantor listed on Schedule 1 attached hereto; and
- (b) all Proceeds of any of the foregoing;

provided, that (i) this Patent Security Agreement shall not constitute a grant of a security interest in any property to the extent that and for as long as such grant of a security interest would be prohibited by the terms of the Guarantee and Collateral Agreement; and (ii) the security interest granted hereby (A) shall attach to all proceeds of such property, (B) shall attach to such property immediately and automatically (without need for any further grant or act) at such time as the condition described in clause (i) ceases to exist and (C) to the extent severable, shall, in any event, attach to all rights in respect of such property that are not subject to the applicable condition described in clause (i).

The security interest granted pursuant to this Patent Security Agreement is granted concurrently and in conjunction with security interest granted to the Collateral Agent pursuant to the Guarantee and Collateral Agreement and Grantors hereby acknowledge and affirm that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Guarantee and Collateral Agreement. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Guarantee and Collateral Agreement, the provisions of the Guarantee and Collateral Agreement shall govern.

The term of this Patent Security Agreement shall be coterminous with the Guarantee and Collateral Agreement.

Each Grantor hereby authorizes and requests that the Commissioner of Patents and Trademarks record this Patent Security Agreement.

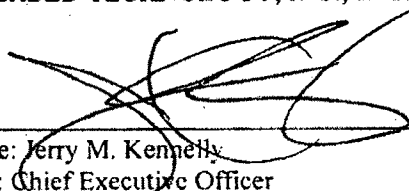
**THIS PATENT SECURITY AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES UNDER THIS PATENT SECURITY AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.**

This Patent Security Agreement may be executed by one or more of the parties to this Patent Security Agreement on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Delivery of an executed signature page of this Patent Security Agreement by facsimile transmission or electronic transmission (in PDF format) shall be effective as delivery of a manually executed counterpart hereof. A set of the copies of this Patent Security Agreement signed by all the parties shall be lodged with the Borrower, the Administrative Agent and the Collateral Agent.

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IN WITNESS WHEREOF, each of the undersigned has caused this Patent Security Agreement to be duly executed and delivered as of the date first above written.

RIVERBED TECHNOLOGY, INC., as Grantor

By   
Name: Jerry M. Kennelly  
Title: Chief Executive Officer

OPNET TECHNOLOGIES, INC., as Grantor

By   
Name: Jerry M. Kennelly  
Title: Chief Executive Officer

[Signature Page to Patent Security Agreement]

**PATENT**  
**REEL: 029646 FRAME: 0083**



Accepted and Agreed:

MORGAN STANLEY & CO. LLC,  
as Collateral Agent

By: 

Name:

Title:

[Signature Page to Patent Security Agreement]

## PATENTS

## Issued Patents

## U.S. PATENTS REGISTRATIONS AND APPLICATIONS

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	09/013,980	5,945,933	1/27/1998	8/31/1999	Adaptive packet compression apparatus and method
Riverbed Technology, Inc.	09/103,621	6,266,337	6/23/1998	7/24/2001	PACKET RETRANSMISSION ELIMINATOR
Riverbed Technology, Inc.	09/103,621	6,266,337	6/23/1998	7/24/2001	Packet retransmission eliminator
Riverbed Technology, Inc.	09/218,953	6,121,903	12/22/1998	9/19/2000	ON-THE-FLY DATA RE-COMPRESSION
Riverbed Technology, Inc.	09/218,953	6,121,903	12/22/1998	9/19/2000	On-the-fly data re-compression
Riverbed Technology, Inc.	09/931,223	7,702,806	8/16/2001	4/20/2010	STATISTICS COLLECTION FOR NETWORK TRAFFIC
Riverbed Technology, Inc.	09/931,291	7,278,159	8/16/2001	10/2/2007	COORDINATED THWARTING OF DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/931,344	7,836,498	8/16/2001	11/16/2010	DEVICE TO PROTECT VICTIM SITES DURING DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/931,487	7,743,134	8/16/2001	6/22/2010	THWARTING SOURCE ADDRESS SPOOFING-BASED DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/931,558	7,124,440	8/16/2001	10/17/2006	MONITORING NETWORKS TRAFFIC DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/931,561	7,043,759	8/16/2001	5/9/2006	ARCHITECTURE TO THWART DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	09/946,787	7,398,317	9/5/2001	7/8/2008	THWARTING CONNECTION-BASED DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	10/062,974	7,213,264	1/31/2002	5/1/2007	ARCHITECTURE TO THWART DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	10/066,232	7,743,415	1/31/2002	6/22/2010	DENIAL OF SERVICE ATTACKS

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Riverbed Technology, Inc.	10/066,252	7,657,934	1/31/2002	2/2/2010	CHARACTERIZATION ARCHITECTURE TO THWART DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	10/137,744	7,581,023	4/30/2002	8/25/2009	ARCHITECTURE TO THWART DENIAL OF SERVICE ATTACKS
Riverbed Technology, Inc.	10/285,315	7120666	10/30/2002	10/10/2006	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATION SYSTEMS
Riverbed Technology, Inc.	10/285,330	6667700	10/30/2002	12/23/2003	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	10/640,405	8069225	8/12/2003	11/29/2011	TRANSPARENT CLIENT-SERVER TRANSACTION ACCELERATOR
Riverbed Technology, Inc.	10/640,459	7,650,416	8/12/2003	1/19/2010	CONTENT DELIVERY FOR CLIENT-SERVER PROTOCOLS WITH USER AFFINITIES USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	10/640,459	7650416	8/12/2003	1/19/2010	CONTENT DELIVERY FOR CLIENT-SERVER PROTOCOLS WITH USER AFFINITIES USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	10/640,562	7318100	8/12/2003	1/8/2008	COOPERATIVE PROXY AUTO-DISCOVERY AND CONNECTION INTERCEPTION
Riverbed Technology, Inc.	10/701,154		11/3/2003		CONNECTION BASED ANOMALY DETECTION
Riverbed Technology, Inc.	10/701,155	7,872,272	11/3/2003	11/2/2010	CONNECTION TABLE FOR INTRUSION DETECTION
Riverbed Technology, Inc.	10/701,157	7,774,839	11/3/2003	8/10/2010	FEEDBACK MECHANISM TO MINIMIZE FALSE ASSERTIONS OF A NETWORK INTRUSION
Riverbed Technology, Inc.	10/701,346	7,949,737	11/3/2003	5/24/2011	ROLE CORRELATION
Riverbed Technology, Inc.	10/701,356		11/3/2003		AGGREGATOR FOR CONNECTION BASED ANOMALY DETECTION
Riverbed Technology, Inc.	10/701,376	7,363,656	11/3/2003	4/22/2008	EVENT DETECTION/ANOMALY

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	10/701,381	8,191,136	11/3/2003	5/29/2012	CORRELATION HEURISTICS
Riverbed Technology, Inc.	10/701,392	8,090,809	11/3/2003	1/3/2012	CONNECTION BASED DENIAL OF SERVICE DETECTION
Riverbed Technology, Inc.	10/701,400	7,461,404	11/3/2003	12/2/2008	ROLE GROUPING
Riverbed Technology, Inc.	10/701,404	7,716,737	11/3/2003	5/11/2010	DETECTION OF UNAUTHORIZED ACCESS IN A NETWORK
Riverbed Technology, Inc.	10/702,073	7,664,963	11/3/2003	2/16/2010	CONNECTION BASED DETECTION OF SCANNING ATTACKS
Riverbed Technology, Inc.	10/731,687	6828925	12/8/2003	12/7/2004	DATA COLLECTORS IN CONNECTION-BASED INTRUSION DETECTION
Riverbed Technology, Inc.	10/803,167	7,698,730	3/16/2004	4/13/2010	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION
Riverbed Technology, Inc.	10/880,332		6/28/2004		IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	10/880,333	7,929,534	6/28/2004	4/19/2011	SERVICE DETECTION
Riverbed Technology, Inc.	10/955,450	7,706,273	9/30/2004	4/27/2010	RULE BASED ALERTING IN ANOMALY DETECTION
Riverbed Technology, Inc.	10/957,850	7,764,626	10/4/2004	7/27/2010	FLOW LOGGING FOR CONNECTION-BASED ANOMALY DETECTION
Riverbed Technology, Inc.	10/968,868	6961009	10/18/2004	11/1/2005	PORT TRACKING ON DYNAMICALLY NEGOTIATED PORTS
Riverbed Technology, Inc.	10/974,386	7,760,653	10/26/2004	7/20/2010	ROLE GROUPING OF HOSTS IN COMPUTER NETWORKS
Riverbed Technology, Inc.	11/124,807		5/9/2005		CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	11/124,830		5/9/2005		STACKABLE AGGREGATION FOR CONNECTION BASED ANOMALY DETECTION
					RE-USING SERVER SIDE CONNECTIONS
					ISOLATED PROCESSING ENVIRONMENT

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	11/124,835	7,523,178	5/9/2005	4/21/2009	ASSUME RESPONSIBILITY ON FAILURE
Riverbed Technology, Inc.	11/145,201		6/3/2005		METHOD AND SYSTEM FOR MANAGING DATA
Riverbed Technology, Inc.	11/223,789	7116249	9/8/2005	10/3/2006	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	11/229,016	7428573	9/15/2005	9/23/2008	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATION SYSTEMS
Riverbed Technology, Inc.	11/242,540		10/3/2005		Peer signaling protocol and system for decentralized traffic management
Riverbed Technology, Inc.	11/243,068		10/3/2005		RELIABILITY AND AVAILABILITY OF DISTRIBUTED SERVERS
Riverbed Technology, Inc.	11/273,861	7853699	11/14/2005	12/14/2010	RULES-BASED TRANSACTION PREFETCHING USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	11/377,906		3/15/2006		CONNECTION FORWARDING
Riverbed Technology, Inc.	11/387,087		3/21/2006		EMAIL-BASED WORM PROPAGATION PROPERTIES
Riverbed Technology, Inc.	11/387,092		3/21/2006		WORM PROPAGATION MITIGATION
Riverbed Technology, Inc.	11/387,114	8,006,306	3/21/2006	8/23/2011	EXPLOIT-BASED WORM PROPAGATION MITIGATION
Riverbed Technology, Inc.	11/489,414		7/18/2006		SPLIT TERMINATION FOR SECURE COMMUNICATION PROTOCOLS
Riverbed Technology, Inc.	11/494,025		7/26/2006		CONGESTION MANAGEMENT OVER LOSSY NETWORK CONNECTIONS
Riverbed Technology, Inc.	11/494,352		7/26/2006		SERIAL CLUSTERING
Riverbed Technology, Inc.	11/494,364	8204058	7/26/2006	6/19/2012	AUTOMATIC FRAMING SELECTION
Riverbed Technology, Inc.	11/508,531	7477166	8/22/2006	1/13/2009	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	11/618,190	7733910	12/29/2006	6/8/2010	DATA SEGMENTATION USING

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Riverbed Technology, Inc.	11/683,325		3/7/2007		SHIFT-VARYING PREDICATE FUNCTION FINGERPRINTING
Riverbed Technology, Inc.	11/754,940		5/29/2007		ADDRESS MANIPULATION FOR NETWORK TRANSPARENCY AND TROUBLESHOOTING
Riverbed Technology, Inc.	11/755,692	7769834	5/30/2007	8/3/2010	THROTTLING OF PREDICTIVE ACKS IN AN ACCELERATED NETWORK COMMUNICATION SYSTEM
Riverbed Technology, Inc.	11/756,584	7480240	5/31/2007	1/20/2009	A SYSTEM FOR SELECTING A PROXY PAIR BASED ON CONFIGURATIONS OF AUTODISCOVERED PROXIES ON A NETWORK
Riverbed Technology, Inc.	11/762,688		6/13/2007		SERVICE CURVE MAPPING
Riverbed Technology, Inc.	12/044,861		3/7/2008		COOPERATIVE OPERATION OF NETWORK TRANSPORT AND NETWORK QUALITY OF SERVICE MODULES
Riverbed Technology, Inc.	12/106,272		4/19/2008		METHOD AND APPARATUS FOR ACCELERATION BY PREFETCHING ASSOCIATED OBJECTS
Riverbed Technology, Inc.	12/117,629		5/8/2008		EVENT DETECTION/ANOMALY CORRELATION HEURISTICS
Riverbed Technology, Inc.	12/135,114		6/6/2008		A HYBRID SEGMENT-ORIENTED FILE SERVER AND WAN ACCELERATOR
Riverbed Technology, Inc.	12/140,184		6/16/2008		COOPERATIVE PROXY AUTO- DISCOVERY AND CONNECTION INTERCEPTION
Riverbed Technology, Inc.	12/191,514	8176186	8/14/2008	5/8/2012	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATIONS SYSTEMS
Riverbed Technology, Inc.	12/191,805	7849134	8/14/2008	12/7/2010	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATION SYSTEMS
Riverbed Technology, Inc.	12/210,087	7839781	9/12/2008	11/23/2010	SERVICE CURVE MAPPING
Riverbed Technology, Inc.	12/235,325	8,266,114	9/22/2008	9/11/2012	LOG STRUCTURED CONTENT

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Riverbed Technology, Inc.	12/235,548		9/22/2008		ADDRESSABLE DEDUPLICATING STORAGE
Riverbed Technology, Inc.	12/266,054		11/6/2008		STORAGE SYSTEM FOR DATA VIRTUALIZATION AND DEDUPLICATION
Riverbed Technology, Inc.	12/266,081		11/6/2008		USER INTERFACE FOR NETWORK EVENTS AND TUNING
Riverbed Technology, Inc.	12/266,105		11/6/2008		IMPACT SCORING AND REDUCING FALSE POSITIVES
Riverbed Technology, Inc.	12/280,760		10/24/2008		DETECTING OUTLIERS IN NETWORK TRAFFIC TIME SERIES
Riverbed Technology, Inc.	12/296,062		11/6/2008		METHOD FOR PROVIDING WEB APPLICATION SECURITY
Riverbed Technology, Inc.	12/327,681		12/3/2008		SERVER CONFIGURATION SELECTION FOR SSL INTERCEPTION
Riverbed Technology, Inc.	12/327,693		12/3/2008		REDUCING LATENCY OF SPLIT-TERMINATED SECURE COMMUNICATION PROTOCOL SESSIONS
Riverbed Technology, Inc.	12/327,766		12/3/2008		TRANSACTION ACCELERATION USING APPLICATION-SPECIFIC LOCKING
Riverbed Technology, Inc.	12/330,197	7852237	12/8/2008	12/14/2010	CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	12/331,257	8140690	12/9/2008	3/20/2012	CONNECTION FORWARDING
Riverbed Technology, Inc.	12/352,959		1/13/2009		INTERCEPTING AND SPLIT-TERMINATING AUTHENTICATED COMMUNICATION CONNECTIONS
Riverbed Technology, Inc.	12/391,967	7953869	2/24/2009	5/31/2011	COOPERATIVE PROXY AUTO-DISCOVERY AND CONNECTION INTERCEPTION
Riverbed Technology, Inc.	12/396,904		3/3/2009		SPLIT TERMINATION OF SECURE COMMUNICATION SESSIONS WITH

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Riverbed Technology, Inc.	12/398,898	7,984,160	3/5/2009	7/19/2011	MUTUAL CERTIFICATE-BASED AUTHENTICATION
Riverbed Technology, Inc.	12/416,057		3/31/2009		ESTABLISHING A SPLIT-TERMINATED COMMUNICATION CONNECTION THROUGH A STATEFUL FIREWALL WITH NETWORK TRANSPARENCY
Riverbed Technology, Inc.	12/416,067		3/31/2009		VIRTUAL FILE SYSTEM STACK FOR DATA DEDUPLICATION
Riverbed Technology, Inc.	12/425,513		4/17/2009		LOG STRUCTURED CONTENT ADDRESSABLE DEDUPLICATING STORAGE
Riverbed Technology, Inc.	12/495,815		7/1/2009		CALL TO EXTERNAL PROCESS
Riverbed Technology, Inc.	12/496,405		7/1/2009		DEFINING NETWORK TRAFFIC PROCESSING FLOWS BETWEEN VIRTUAL MACHINES
Riverbed Technology, Inc.	12/496,430		7/1/2009		NETWORK TRAFFIC PROCESSING PIPELINE FOR VIRTUAL MACHINES IN A NETWORK DEVICE
Riverbed Technology, Inc.	12/496,466		7/1/2009		EXTENDED NETWORK PROTOCOLS FOR COMMUNICATION METADATA WITH VIRTUAL MACHINES
Riverbed Technology, Inc.	12/496,484		7/1/2009		MAINTAINING VIRTUAL MACHINES IN A NETWORK DEVICE
Riverbed Technology, Inc.	12/502,983		7/14/2009		METHODS AND SYSTEMS FOR SECURE COMMUNICATIONS USING A LOCAL CERTIFICATION AUTHORITY
Riverbed Technology, Inc.	12/511,248		7/29/2009		
Riverbed Technology, Inc.	12/554,113		9/4/2009		OVERLOAD BANDWIDTH REDUCTION
Riverbed Technology, Inc.	12/571,430	8,180,902	9/30/2009	5/15/2012	ESTABLISHING NETWORK CONNECTIONS BETWEEN TRANSPARENT NETWORK DEVICES



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Riverbed Technology, Inc.	12/571,433	8,181,060	9/30/2009	5/15/2012	PREVENTING DATA CORRUPTION WITH TRANSPARENT NETWORK CONNECTIONS
Riverbed Technology, Inc.	12/615,340		11/10/2009		TRAFFIC MANAGEMENT APPARATUS
Riverbed Technology, Inc.	12/632,703		12/7/2009		CONTENT DELIVERY FOR CLIENT SERVER PROTOCOLS WITH USER AFFINITIES USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	12/649,627		12/30/2009		
Riverbed Technology, Inc.	12/729,127		3/22/2010		
Riverbed Technology, Inc.	12/730,179		3/23/2010		VIRTUALIZED DATA STORAGE OVER WIDE-AREA NETWORKS
Riverbed Technology, Inc.	12/730,185		3/23/2010		VIRTUALIZED DATA STORAGE SYSTEM ARCHITECTURE
Riverbed Technology, Inc.	12/730,192		3/23/2010		VIRTUALIZED DATA STORAGE SYSTEM CACHE MANAGEMENT
Riverbed Technology, Inc.	12/730,198		3/23/2010		VIRTUALIZED DATA STORAGE SYSTEM OPTIMIZATIONS
Riverbed Technology, Inc.	12/818,872		6/18/2010		VIRTUALIZED DATA STORAGE APPLICATIONS AND OPTIMIZATIONS
Riverbed Technology, Inc.	12/825,296		6/28/2010		SELECTING PROXIES FROM AMONG AUTODISCOVERED PROXIES
Riverbed Technology, Inc.	12/826,430		6/29/2010		METHOD AND APPARATUS FOR SPLIT-TERMINATING A SECURE NETWORK CONNECTION, WITH CLIENT AUTHENTICATION
Riverbed Technology, Inc.	12/843,754		7/26/2010		INTERCEPTION OF A CLOUD-BASED COMMUNICATION CONNECTION
Riverbed Technology, Inc.	12/853,729		8/10/2010		MANAGING CLIENT REQUESTS FOR DATA
Riverbed Technology, Inc.	12/878,992		9/9/2010		
Riverbed Technology, Inc.	12/893,894		9/29/2010		SYSTEM AND METHOD FOR WARMING AN OPTIMIZATION

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Riverbed Technology, Inc.	12/894,681		9/30/2010		DEVICE
Riverbed Technology, Inc.	12/895,811		9/30/2010		RULES-BASED TRANSACTIONS PREFETCHING USING CONNECTION END-POINT PROXIES
Riverbed Technology, Inc.	12/895,835		9/30/2010		CLOUD SYNTHETIC BACKUPS
Riverbed Technology, Inc.	12/902,964		10/12/2010		CLOUD-BASED DISASTER RECOVERY OF BACKUP DATA AND METADATA
Riverbed Technology, Inc.	12/903,975		10/13/2010		SERVICE CURVE MAPPING
Riverbed Technology, Inc.	12/916,112	8271688	10/29/2010	9/18/2012	METHOD OF IMPROVING PERFORMANCE OF A DATA STORAGE DEVICE
Riverbed Technology, Inc.	12/940,017		11/4/2010		TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATIONS SYSTEMS
Riverbed Technology, Inc.	12/942,988		11/9/2010		CONTENT-BASED SEGMENTATION SCHEME FOR DATA COMPRESSION IN STORAGE AND TRANSMISSION INCLUDING HIERARCHICAL SEGMENT REPRESENTATION
Riverbed Technology, Inc.	12/942,991		11/9/2010		DISASTER RECOVERY USING LOCAL AND CLOUD SPANNING DE DUPLICATED STORAGE SYSTEM
Riverbed Technology, Inc.	12/978,056		12/23/2010		WAN-OPTIMIZED LOCAL AND CLOUD SPANNING DE DUPLICATED STORAGE SYSTEM
Riverbed Technology, Inc.	12637476	7,886,218	12/14/2009	2/8/2011	VIRTUAL DATA STORAGE DEVICES AND APPLICATIONS OVER WIDE AREA NETWORKS
Riverbed Technology, Inc.	13/070,064		3/23/2011		METHODS AND DEVICES FOR POST PROCESSING RENDERED WEB PAGES HANDLING REQUESTS OF POST PROCESSED WEB PAGES
Riverbed Technology, Inc.	13/070,089		3/23/2011		
Riverbed Technology, Inc.	13/074,602		3/29/2011		
Riverbed Technology, Inc.	13/074,923		3/29/2011		

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
Riverbed Technology, Inc.	13/082,186	8316118	4/7/2011	11/20/2012	COOPERATIVE PROXY AUTO-DISCOVERY AND CONNECTION INTERCEPTION
Riverbed Technology, Inc.	13/115,692		5/25/2011		APPARATUS FOR ROUTING REQUESTS
Riverbed Technology, Inc.	13/152,152	8,255,544	6/2/2011	8/28/2012	ESTABLISHING A SPLIT-TERMINATED COMMUNICATION CONNECTION THROUGH A STATEFUL FIREWALL, WITH NETWORK TRANSPARENCY
Riverbed Technology, Inc.	13/166,321		6/22/2011		BOOTING DEVICES USING VIRTUAL STORAGE ARRAYS OVER WIDE-AREA NETWORKS
Riverbed Technology, Inc.	13/170,063		6/27/2011		
Riverbed Technology, Inc.	13/218,504		8/26/2011		MONITORING CONNECTIONS
Riverbed Technology, Inc.	13/249,177		9/29/2011		
Riverbed Technology, Inc.	13/249,183		9/29/2011		
Riverbed Technology, Inc.	13/249,195		9/29/2011		
Riverbed Technology, Inc.	13/249,201		9/29/2011		
Riverbed Technology, Inc.	13/250,200		9/30/2011		
Riverbed Technology, Inc.	13/251,148	8312101	9/30/2011	11/13/2012	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATIONS SYSTEMS
Riverbed Technology, Inc.	13/282,393		10/26/2011		
Riverbed Technology, Inc.	13/315,619		12/9/2011		
Riverbed Technology, Inc.	13/341,825		12/30/2011		
Riverbed Technology, Inc.	13/410,032		3/1/2012		CONNECTION FORWARDING
Riverbed Technology, Inc.	13/410,689		3/2/2012		
Riverbed Technology, Inc.	13/415,815		3/8/2012		
Riverbed Technology, Inc.	13/415,819		3/8/2012		
Riverbed Technology, Inc.	13/415,821		3/8/2012		
Riverbed Technology, Inc.	13/415,823		3/8/2012		
Riverbed Technology, Inc.	13/436,873		3/31/2012		

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Riverbed Technology, Inc.	13/436,874		3/31/2012		
Riverbed Technology, Inc.	13/441,681		4/6/2012		TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATIONS SYSTEMS
Riverbed Technology, Inc.	13/453,731		4/23/2012		
Riverbed Technology, Inc.	13/459,065	8321580	4/27/2012	11/27/2012	TRANSACTION ACCELERATOR FOR CLIENT-SERVER COMMUNICATION SYSTEMS
Riverbed Technology, Inc.	13/460,392		4/30/2012		ESTABLISHING NETWORK CONNECTIONS BETWEEN TRANSPARENT NETWORK DEVICES
Riverbed Technology, Inc.	13/464,713		5/4/2012		
Riverbed Technology, Inc.	13/464,714		5/4/2012		
Riverbed Technology, Inc.	13/471,956		5/15/2012		
Riverbed Technology, Inc.	13/491,501		6/7/2012		
Riverbed Technology, Inc.	13/530,740		6/22/2012		
Riverbed Technology, Inc.	13/536,770		6/28/2012		
Riverbed Technology, Inc.	13/589,896		8/20/2012		
Riverbed Technology, Inc.	13/650,354		10/12/2012		
Riverbed Technology, Inc.	13/670,753		11/7/2012		
Riverbed Technology, Inc.	61/494,390		6/7/2011		
Riverbed Technology, Inc.	61/502,856		6/29/2011		
Riverbed Technology, Inc.	61/503,487		6/30/2011		
Riverbed Technology, Inc.	61/606,893		3/5/2012		
Riverbed Technology, Inc.	61/699,730		9/11/2012		
Riverbed Technology, Inc.	61/730,392		11/27/2012		
Riverbed Technology, Inc.	95/002,308		9/14/2012		Transaction Accelerator for Client-Server Communications Systems
Riverbed Technology, Inc.	95/002,310		9/14/2012		Transaction Accelerator for Client-Server Communications Systems
Riverbed Technology, Inc.	PCT/US2009/004084		7/14/2009		
Riverbed Technology, Inc.	PCT/US2011/030776		3/31/2011		
Riverbed Technology, Inc.	PCT/US2012/28382		3/8/2012		ACCESSING NETWORK TRAFFIC DATA AT MULTIPLE TIME SCALES

Owner	Application No.	Patent No.	Filing Date	Issue Date	Title
					AND LEVELS OF DETAIL

Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	09/151,748	11.09.1998	6,240,416	29.05.2001	DISTRIBUTED METADATA SYSTEM AND METHOD
OPNET Technologies, Inc.	09/108,503	01.07.1998	6,278,963	21.08.2001	SYSTEM ARCHITECTURE FOR DISTRIBUTION OF DISCRETE-EVENT SIMULATIONS
OPNET Technologies, Inc.	09/345,249	30.06.1999	6,600,752	29.07.2003	METHOD FOR REDUCING EXCESS QUEUE TIME IN COMMUNICATION NODES
OPNET Technologies, Inc.	10/186,401	01.07.2002	6,643,613	04.11.2003	SYSTEM AND METHOD FOR MONITORING PERFORMANCE METRICS
OPNET Technologies, Inc.	09/539,434	30.03.2000	6,674,717	06.01.2004	METHOD FOR REDUCING PACKET LOSS AND INCREASING INTERNET FLOW BY FEEDBACK CONTROL
OPNET Technologies, Inc.	09/624,092	24.07.2000	6,820,042	16.11.2004	MIXED MODE NETWORK SIMULATOR
OPNET Technologies, Inc.	09/682,324	20.08.2001	6,823,382	23.11.2004	MONITORING AND CONTROL ENGINE FOR MULTI-TIERED SERVICE-LEVEL MANAGEMENT OF DISTRIBUTED WEB-APPLICATION SERVERS
OPNET Technologies, Inc.	10/205,101	23.07.2002	6,928,472	09.08.2005	METHOD FOR CORRELATING CONGESTION TO PERFORMANCE METRICS IN INTERNET TRAFFIC
OPNET Technologies, Inc.	09/846,449	30.04.2001	6,947,381	20.09.2005	METHOD FOR REDUCING PACKET LOSS BY PHASE TRANSITION IDENTIFICATION IN COMMUNICATION NETWORKS
OPNET Technologies, Inc.	09/879,838	21.06.2001	6,968,540	22.11.2005	SOFTWARE INSTRUMENTATION METHOD AND APPARATUS
OPNET Technologies, Inc.	09/846,174	30.04.2001	6,990,071	24.01.2006	METHOD FOR REDUCING FETCH TIME IN A CONGESTED COMMUNICATION NETWORK
OPNET Technologies, Inc.	09/846,450	30.04.2001	7,072,297	04.07.2006	METHOD FOR DYNAMICAL IDENTIFICATION OF NETWORK CONGESTION CHARACTERISTICS
OPNET Technologies, Inc.	10/198,689	18.07.2002	7,076,695	11.07.2006	SYSTEM AND METHODS FOR ADAPTIVE THRESHOLD DETERMINATION FOR PERFORMANCE METRICS

Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	10/325,148	20.12.2002	7,139,692	21.11.2006	FLOW PROPAGATION ANALYSIS USING ITERATIVE SIGNALING
OPNET Technologies, Inc.	10/243,534	13.09.2002	7,219,034	15.05.2007	SYSTEM AND METHODS FOR DISPLAY OF TIME-SERIES DATA DISTRIBUTION
OPNET Technologies, Inc.					SIMULATION WITH CONVERGENCE-DETECTION
OPNET Technologies, Inc.	10/112,179	28.03.2002	7,219,047	15.05.2007	SKIP-AHEAD
OPNET Technologies, Inc.	09/854,321	11.05.2001	7,248,564	24.07.2007	METHOD FOR DETERMINING NETWORK CONGESTION AND LINK CAPACITIES
OPNET Technologies, Inc.	10/821,558	09.04.2004	7,254,389	07.08.2007	WIRELESS LINK SIMULATION WITH GENERIC CACHING
OPNET Technologies, Inc.	10/195,905	15.07.2002	7,277,843	02.10.2007	METHOD FOR REAL-TIME AUTO-DETECTION OF OUTLIERS
OPNET Technologies, Inc.	09/846,452	30.04.2001	7,333,431	19.02.2008	METHOD FOR ACCELERATING TCP FLOWS IN COMMUNICATION NETWORKS WITH DYNAMIC CONTROL
OPNET Technologies, Inc.	10/195,904	15.07.2002	7,337,206	26.02.2008	METHOD FOR DETECTING CONGESTION IN INTERNET TRAFFIC
OPNET Technologies, Inc.	10/923,576	20.08.2004	7,443,870	28.10.2008	METHOD FOR PRIORITIZING GROUPED DATA REDUCTION
OPNET Technologies, Inc.	11/832,319	01.08.2007	7,444,263	28.10.2008	PERFORMANCE METRIC COLLECTION AND AUTOMATED ANALYSIS
OPNET Technologies, Inc.	10/923,214	20.08.2004	7,469,203	23.12.2008	WIRELESS NETWORK HYBRID SIMULATION
OPNET Technologies, Inc.	10/205,135	23.07.2002	7,509,229	24.03.2009	BAYESIAN APPROACH TO CORRELATING CONGESTION TO PERFORMANCE METRICS IN INTERNET TRAFFIC
OPNET Technologies, Inc.	11/061,978	18.02.2005	7,519,700	14.04.2009	Method and System for Topological Navigation of Hierarchical Data Groups
OPNET Technologies, Inc.	09/846,451	30.04.2001	7,551,560	23.06.2009	Method of Reducing Packet Loss by Resonance Identification in Communication Networks
OPNET Technologies, Inc.	10/914,603	09.08.2004	7,570,669	04.08.2009	Synchronizing Packet Traces

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Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	11/173,758	30.06.2005	7,593,351	22.09.2009	Method and System for Collecting and Consolidating Network Traffic Information
OPNET Technologies, Inc.	11/778,053	15.07.2007	7,639,609	29.12.2009	Controlled Incremental Multi-Protocol Label Switching (MPLS) Traffic Engineering
OPNET Technologies, Inc.	11/835,130	07.08.2007	7,672,238	02.03.2010	Mapping Off-Network Traffic to an Administered Network
OPNET Technologies, Inc.	11/494,692	27.07.2006	7,688,743	30.03.2010	Tracing Routing Differences
OPNET Technologies, Inc.	11/503,553	11.08.2006	7,693,699	06.04.2010	Incremental Update of Virtual Devices in a Modeled Network
OPNET Technologies, Inc.	11/173,752	30.06.2005	7,729,240	01.06.2010	Method and System for Identifying Duplicate Packets in Flow-Based Network Monitoring System
OPNET Technologies, Inc.	11/180,879	13.07.2005	7,729,256	01.06.2010	Correlating Packets
OPNET Technologies, Inc.	11/506,665	18.08.2006	7,730,099	01.06.2010	Storage and Retrieval of Richly Typed Hierarchical Network Models
OPNET Technologies, Inc.	12/098,436	06.04.2008	7,813,281	12.10.2010	Interactive MPLS Traffic Engineering
OPNET Technologies, Inc.	11/776,736	12.07.2007	7,839,790	23.11.2010	Network Congestion Analysis
OPNET Technologies, Inc.	11/752,283	22.05.2007	7,843,815	30.11.2010	Estimation of Time-Varying Latency Based on Network Trace Information
OPNET Technologies, Inc.	12/195,393	20.08.2008	7,843,840	30.11.2010	Traffic Independent Survivability Analysis
OPNET Technologies, Inc.	11/875,900	20.10.2007	7,844,423	30.11.2010	Modeling and Simulating Wireless MAC Protocols
OPNET Technologies, Inc.	10/845,517	14.05.2004	7,848,259	07.12.2010	System and Methods for Inferring Services on a Network
OPNET Technologies, Inc.	11/397,359	04.04.2006	7,885,200	08.02.2011	Application Delay Analysis
OPNET Technologies, Inc.	12/397,356	04.03.2009	7,885,206	08.02.2011	Method and System for Topological Navigation of Hierarchical Data Groups
OPNET Technologies, Inc.	11/779,429	18.07.2007	7,889,641	15.02.2011	Path Flow Formulation for Fast Reroute Bypass Tunnels in MPLS
OPNET Technologies, Inc.	11/506,648	18.08.2006	7,894,369	22.02.2011	Network Physical Connection Inference for IP Tunnels



Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	12/478,775	05.06.2009	8,005,006	23.08.2011	Discovery of Multiple-Parent Dependencies in Network Performance Analysis
OPNET Technologies, Inc.	11/125,562	10.05.2005	8,005,019	23.08.2011	Fuzzy Routing
OPNET Technologies, Inc.	11/735,474	15.04.2007	8,005,945	23.08.2011	Aggregating Policy Criteria Parameters into Ranges for Efficient Network Analysis
OPNET Technologies, Inc.	10/903,585	02.08.2004	8,010,643	30.08.2011	System and Methods for Simulating Traffic Generation
OPNET Technologies, Inc.	11/829,925	29.07.2007	8,089,904	03.01.2012	Link Inference in Large Networks Based on Incomplete Data
OPNET Technologies, Inc.	11/755,089	30.05.2007	8,095,645	10.01.2012	Traffic Flow Inference Based on Link Loads and Gravity Measures
OPNET Technologies, Inc.	12/060,271	01.04.2008	8,095,649	10.01.2012	Network Delay Analysis Including Parallel Delay Effects
OPNET Technologies, Inc.	10/903,586	02.08.2004	8,130,661	06.03.2012	Systems and Methods for Intelligent Probe Testing
OPNET Technologies, Inc.	11/494,441	27.07.2006	8,130,759	06.03.2012	Routing Validation
OPNET Technologies, Inc.	11/834,058	06.08.2007	8,135,990	13.03.2012	Multi-Variate Network Survivability Analysis
OPNET Technologies, Inc.	11/507,114	19.08.2006	8,140,665	20.03.2012	Managing Captured Network Traffic Data
OPNET Technologies, Inc.	12/498,786	07.07.2009	8,144,627	27.03.2012	Inferring Connectivity in the Presence of Conflicting Network Data
OPNET Technologies, Inc.	11/844,765	24.08.2007	8,159,971	17.04.2012	System and Method for Inferring Connectivity Among Network Segments in the Absence of Configuration Information
OPNET Technologies, Inc.	12/192,103	14.08.2008	8,165,038	24.04.2012	Network Physical Connection Inference for IP Tunnels
OPNET Technologies, Inc.	12/176,317	18.07.2008	8,166,004	24.04.2012	Verifying Data Consistency Among Multiple Structured Files
OPNET Technologies, Inc.	11/358,536	21.02.2006	8,195,443	05.06.2012	Predictive Modeling and Graphical Editing of Application Logic
OPNET Technologies, Inc.	11/832,923	02.08.2007	8,195,736	05.06.2012	Mapping Virtual Internet Protocol Addresses

Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	12/143,799	22.06.2008	8,228,804	24.07.2012	Tuning Routing Metrics to Reduce Maximum Link Utilization and/or Provide Failure Resiliency
OPNET Technologies, Inc.	11/503,554	11.08.2006	8,230,491	24.07.2012	Automatic Access to Network Devices Using Various Authentication Schemes
OPNET Technologies, Inc.	11/501,388	09.08.2006	8,249,094	21.08.2012	Wireless MAC and Link-Layer Simulation Modeling
OPNET Technologies, Inc.	12/196,044	21.08.2008	8,255,906	28.08.2012	Modeling Overhead for a Plurality of Virtualization Technologies in a Computer System
OPNET Technologies, Inc.	12/861,832	24.08.2010	8,296,424	23.10.2012	Network Capacity Planning
OPNET Technologies, Inc.	61/611,781	16.03.2012			
OPNET Technologies, Inc.	61/588,357	19.01.2012			
OPNET Technologies, Inc.	61/576,172	15.12.2011			
OPNET Technologies, Inc.	61/568,678	09.12.2011			
OPNET Technologies, Inc.	61/559,923	15.11.2011			
OPNET Technologies, Inc.	61/559,917	15.11.2011			
OPNET Technologies, Inc.	13/654,859	18.10.2012			
OPNET Technologies, Inc.	13/657,541	22.10.2012			
OPNET Technologies, Inc.	13/645,688	05.10.2012			
OPNET Technologies, Inc.	13/595,372	27.08.2012			
OPNET Technologies, Inc.	13/590,088	20.08.2012			
OPNET Technologies, Inc.	13/570,572	09.08.2012			
OPNET Technologies, Inc.	13/568,988	07.08.2012			
OPNET Technologies, Inc.	13/556,178	23.07.2012			
OPNET Technologies, Inc.	13/556,174	23.07.2012			
OPNET Technologies, Inc.	13/487,895	04.06.2012			
OPNET Technologies, Inc.	13/487,863	04.06.2012	2012/0246307	27.09.2012	Mapping Virtual Internet Protocol Addresses
OPNET Technologies, Inc.	13/454,050	23.04.2012	2012/0209867	16.08.2012	Verifying Data Consistency Among Multiple Structured Files
OPNET Technologies, Inc.	13/454,034	23.04.2012	2012/0207058	16.08.2012	Network Physical Connection Inference for IP

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Owner	Application No.	Application Date	Patent/ Publication No.	Registration / Publication Date	Title
					Tunnels
OPNET Technologies, Inc.	13/448,389	16.04.2012	2012/0201168	09.08.2012	System and Method for Inferring Connectivity Among Network Segments in the Absence of Configuration Information
OPNET Technologies, Inc.	13/444,583	11.04.2012			
OPNET Technologies, Inc.	13/430,541	26.03.2012	2012/0182903	19.07.2012	Inferring Connectivity in the Presence of Conflicting Network Data
OPNET Technologies, Inc.	13/424,005	19.03.2012	2012/0179816	12.07.2012	Managing Captured Network Traffic Data
OPNET Technologies, Inc.	13/412,623	06.03.2012			
OPNET Technologies, Inc.	13/412,615	06.03.2012	2012/0163227	28.06.2012	Systems and Methods for Intelligent Probe Testing
OPNET Technologies, Inc.	13/412,604	05.03.2012	2012/0163197	28-06-2012	Routing Validation Methods and Systems Based on Simulating Route Convergence
OPNET Technologies, Inc.	13/400,973	21.02.2012			
OPNET Technologies, Inc.	13/365,496	03.02.2012			
OPNET Technologies, Inc.	13/365,484	03.02.2012	2012/0246287	27.09.2012	Correlating Input and Output Requests between Client and Server Components in a Multi-Tier Application
OPNET Technologies, Inc.	13/346,453	09.01.2012	2012/0179813	12.07.2012	Traffic Flow Inference Based on Link Loads and Gravity Measures
OPNET Technologies, Inc.	13/333,955	09.05.2007			
OPNET Technologies, Inc.	13/301,688	11.21.2011			
OPNET Technologies, Inc.	13/210,351	15.08.2011	2012/0207161	16.08.2012	Network Path Discovery and Analysis
OPNET Technologies, Inc.	13/186,776	20.07.2011	2011/0276887	10.11.2011	Organizing, Displaying, and Manipulating Network Traffic Data
OPNET Technologies, Inc.	13/165,728	21.06.2011	2011/0252136	13.10.2011	Fuzzy Routing
OPNET Technologies, Inc.	13/165,589	21.06.2011	2011/0320242	29-12-2011	Multi-Variate Sales Performance Analysis System
OPNET Technologies, Inc.	13/117,105	26.05.2011	2011/0296012	01.12.2011	Multi-Tier Message Correlation
OPNET Technologies, Inc.	13/021,709	04.02.2011	2011/0197191	11.08.2011	Correcting Packet Timestamps in Virtualized Environments

Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	12/963,481	08.12.2010	2011/0145715	16.06.2011	Web Transaction Analysis
OPNET Technologies, Inc.	12/907,225	19.10.2010	2011/0040864	17.02.2011	System and Methods for Inferring Services on a Network
OPNET Technologies, Inc.	12/900,357	07.10.2010	2011/0085450	14.04.2011	Network Path Discovery and Analysis
OPNET Technologies, Inc.	12/900,348	07.10.2010	2011/0085449	14.04.2011	Network Path Discovery and Analysis
OPNET Technologies, Inc.	12/705,570	13.02.2010	2010/0211754	19.08.2010	Memory Utilization Analysis
OPNET Technologies, Inc.	12/652,499	05.01.2010	2010/0138688	03.06.2010	Managing Service Levels on a Shared Network
OPNET Technologies, Inc.	12/623,592	23.11.2009	2010/0128623	27.05.2010	End-to-End Analysis of Transactions in Networks with Traffic-Altering Devices
OPNET Technologies, Inc.	12/544,317	20.08.2009	2010/0046395	25.02.2010	Incremental and Targeted Auto-Discovery of Network Device
OPNET Technologies, Inc.	12/435,932	05.05.2009	2009/0279496	12.11.2009	Dedicated and Priority Based Allocation in Multi-Hop Wireless Systems
OPNET Technologies, Inc.	12/176,325	18.07.2008	2009/0055802	26.02.2009	Selective Monitoring of Software Applications
OPNET Technologies, Inc.	12/023,026	30.01.2008	2008/0189353	07.08.2008	System and Methods for Inferring Services on a Network
OPNET Technologies, Inc.	11/941,186	16.11.2007	2008/0120081	22.05.2008	Modeling and Simulating Flow Propagation in Dynamic Bandwidth Systems
OPNET Technologies, Inc.	11/838,417	14.08.2007	2008/0043627	21.02.2008	Network Simulation and Analysis Using Operational Forwarding Data
OPNET Technologies, Inc.	11/776,721	12.07.2007	2008/0022357	24.01.2008	Assessing Network and Device Compliance with Security Policies
OPNET Technologies, Inc.	11/776,708	12.07.2007	2008/0016056	17.01.2008	Identifying and Reporting Differences in Network Activity Data Files
OPNET Technologies, Inc.	11/678,595	24.02.2007	2007/0214206	13.09.2007	User-Configurable Network Performance Monitors
OPNET Technologies, Inc.	11/506,651	18.08.2006	2007/0097883	03.05.2007	Generation of a Network Topology Hierarchy
OPNET Technologies, Inc.	11/506,650	18.08.2006	2007/0043547	22.02.2007	Integrated Debugging Environment for a Network Simulation
OPNET Technologies, Inc.	11/505,228	16.08.2006	2007/0058570	15.03.2007	A Method for Identifying and Analyzing Network Configuration Differences

Owner	Application No.	Application Date	Patent / Publication No.	Registration / Publication Date	Title
OPNET Technologies, Inc.	11/505,176	16.08.2006	2007/0043861	22.02.2007	Capture, Analysis, and Visualization of Concurrent System and Network Behavior of an Application
OPNET Technologies, Inc.	11/505,171	16.08.2006	2007/0157286	05.07.2007	Analyzing Security Compliance Within a Network
OPNET Technologies, Inc.	11/503,555	11.08.2006	2007/0044032	22.02.2007	Visualizing a Complex Network Based on a Set of Objects of Interest
OPNET Technologies, Inc.	11/501,389	09.08.2006	2007/0043752	22.02.2007	Disparate Network Model Synchronization
OPNET Technologies, Inc.	11/490,586	21.07.2006	2007/0041335	22.02.2007	Automatic Estimation of Node Location Based on Trace Information
OPNET Technologies, Inc.	11/358,538	21.02.2006	2006/0190231	24.08.2006	Tracking, Analyzing, and Visualizing Application Delay
OPNET Technologies, Inc.	11/180,888	13.07.2005	2006/0015604	19.01.2006	Network Difference Reporting
OPNET Technologies, Inc.	11/180,878	13.07.2005	2006/0013228	19.01.2006	Packet Tracing
OPNET Technologies, Inc.	11/092,226	28.03.2005	2006/0253566	09.11.2006	Method and System for Managing a Distributed Network of Network Monitoring Devices
OPNET Technologies, Inc.	11/001,985	01.12.2004	2006/0075094	06.04.2006	Method for Discovery and Troubleshooting of Network Application Usage and Performance Issues
OPNET Technologies, Inc.	10/937,986	10.09.2004	2006/0069768	30.03.2006	Method and System for Grouping Diagnostic Information
OPNET Technologies, Inc.	10/914,602	09.08.2004	2005/0047440	03.03.2005	Division of Data Structures for Efficient Simulation
OPNET Technologies, Inc.	10/912,704	05.08.2004	2005/0044215	24.02.2005	System for Automatic Import, Analysis, and Reporting of Network Configuration and Status Information