IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

REVOCATION OF POWER OF ATTORNEY
AND NEW POWER OF ATTORNEY BY ASSIGNEE
AND STATEMENT UNDER 37 C.F.R. §3.73(b)

The Assignees of the entire right, title, and interest hereby revoke all previously granted powers of attorney given in the applications identified in the attached Exhibit A and grant the registered practitioners of EDELL, SHAPIRO & FINNAN, LLC included in the Customer Number provided below, power to act, prosecute, and transact all business in the U.S. Patent and Trademark Office in connection with the applications, any applications claiming priority to these applications, and any patents issuing therefrom.

The Assignees certify that to the best of their knowledge and belief, they are the owners of the entire right, title, and interest of the applications as evidenced by assignment previously recorded in the U.S. Patent and Trademark Office as listed in Exhibit A.

Please direct all correspondence concerning the applications to:

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd, Suite 750
Gaithersburg, MD 20878
(301) 424-3640

CUSTOMER NUMBER: 99499

The undersigned (whose titles are supplied below) are empowered to sign this statement on behalf of the Assignee.

Date: 4-24-2015 Signature: _____

Name: Dan H. Lang
Title: Vice President and Assistant Secretary
Company: Cisco Technology, Inc.

Motorola - Exhibit 1028 - Page 1

Our Ref.	CPOL No.	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Applicant	Search Name	Inventors
0370.1801CON	224036	US	10/122,401	11-Apr-02	7,389,332	17-Jun-08	Method and apparatus for supporting communications between nodes operating in a master-slave configuration	Cisco Technology, Inc.	012159/0533	MUCHOW et al.
0370.1801CON	224036	US	10/122,401	11-Apr-02	7,389,332	17-Jun-08	Method and apparatus for supporting communications between nodes operating in a master-slave configuration	Cisco Technology, Inc.	012159/0533	MUCHOW et al.
0370.1802C	157809	US	10/094,552	7-Mar-02	7,421,478	2-Sep-08	Method and apparatus for exchanging heartbeat messages and configuration information between nodes operating in a master-slave configuration	Cisco Technology, Inc.	012693/0864	James D. MUCHOW
0370.1802CIP	224060	US	10/128,657	22-Apr-02	7,353,259	1-Apr-08	Method and apparatus for exchanging configuration information between nodes operating in a master-slave configuration	Cisco Technology, Inc.	013301/0836	BAKKE et al.
0370.1802CON	954837	US	11/748,966	15-May-07	7,856,480	21-Dec-10	Method and apparatus for exchanging heartbeat messages and configuration information between nodes operating in a master-slave configuration	Cisco Technology, Inc.	012693/0864	James D. MUCHOW

0370.1803C	157812	US	10/131,275	22-Apr-02	7,587,465	8-Sep-09	Method and apparatus for configuring nodes as masters or slaves	Cisco Technology, Inc.	012844/0886	James D. MUCHOW
0370.1805C	224042	US	10/128,656	22-Apr-02	7,165,258	16-Jan-07	SCSI-based storage area network having a SCSI router that routes traffic between SCSI and IP networks	Cisco Technology, Inc.	013367/0004	KUIK et al.
0370.1805CON	952744	US	11/622,436	11-Jan-07	7,437,477	14-Oct-08	SCSI-based storage area network having a SCSI router that routes traffic between SCSI and IP networks	Cisco Technology, Inc.	013367/0004	KUIK et al.
0370.1806C	224189	US	10/306,144	27-Nov-02	7,577,735	18-Aug-09	Transparent mode	Cisco Technology, Inc.	013541/0208	DE GROOTE et al.
0370.1806CON	962173	US	12/511,903	29-Jul-09	8,321,559	27-Nov-12	Transparent mode	Cisco Technology, Inc.	013541/0208	DE GROOTE et al.
0370.1807C	224195	US	10/371,389	21-Feb-03	7,269,644	11-Sep-07	Performance profiling for improved data throughput	Cisco Technology, Inc.	013807/0883	GHANEM et al.
0370.1807DV1	957391	US	11/852,862	10-Sep-07	7,966,403	21-Jun-11	Performance profiling for improved data throughput	Cisco Technology, Inc.	013807/0883	GHANEM et al.
0370.1807DV2	955274	US	11/852,849	10-Sep-07	7,774,449	10-Aug-10	Performance profiling for improved data throughput	Cisco Technology, Inc.	013807/0883	GHANEM et al.
0370.1807DV3	955143	US	11/771,287	29-Jun-07	7,571,209	4-Aug-09	Performance profiling for improved data throughput	Cisco Technology, Inc.	013807/0883	GHANEM et al.
0370.1809C	224207	US	10/375,411	27-Feb-03	7,831,736	9-Nov-10	System and method for supporting VLANs in an iSCSI	Cisco Technology, Inc.	013827/0610	David P. THOMPSON

0370.1810C	957078	US	12/251,230	14-Oct-08	7,941,529	10-May-11	Periodic exporting of information over a flow protocol	Cisco Technology, Inc.	021819/0908	CLAISE et al.
0370.1810P	958299	US	61/035,298	10-Mar-08	N/A	N/A	PERIODIC EXPORTING OF INFORMATION OVER A FLOW PROTOCOL	Cisco Technology, Inc.	021819/0908	CLAISE et al.
0370.1812C	866471	US	11/552,025	23-Oct-06	8,613,088	17-Dec-13	Methods and systems to detect an evasion attack	Cisco Technology, Inc.	018424/0970	VARGHESE et al.
0370.1812P	912894	US	60/764,818	3-Feb-06	N/A	N/A	Detecting Evasion Attacks at High Speeds Without Reassembly	Cisco Technology, Inc.	017547/0697	VARGHESE et al.
0370.1813C	949672	US	11/559,012	13-Nov-06	8,161,395	17-Apr-12	Method for secure data entry in an application	Cisco Technology, Inc.	018510/0233	Sandeep Suresh GIRGAONKAR
0370.1813i	949672-23808	WO	PCT/US07/84017	8-Nov-07	N/A	N/A	Method for secure data entry in an application	Cisco Technology, Inc.	018510/0233	Sandeep Suresh GIRGAONKAR
0370.1814C	861395	US	11/423,375	9-Jun-06	8,259,612	4-Sep-12	Method of routing multicast traffic	Cisco Technology, Inc.	017754/0397	CAI et al.
0370.1814CON	980214	US	13/558,073	25-Jul-12	8,611,252	17-Dec-13	Method of routing multicast traffic	Cisco Technology, Inc.	017754/0397	CAI et al.
0370.1814i	861395-24776	WO	PCT/US2007/002737	31-Jan-07	N/A	N/A	Method of routing multicast traffic	Cisco Technology, Inc.	017754/0397	CAI et al.
0370.1815C	689852	US	11/236,903	28-Sep-05	8,077,838	13-Dec-11	Method and voice communicator to provide a voice communication	Cisco Technology, Inc.	017046/0664	PATEL et al.
0370.1815i	689852-23896	WO	PCT/US2006/033707	28-Aug-06	N/A	N/A	Method and voice communicator to provide a voice communication	Cisco Technology, Inc.	017046/0664	PATEL et al.
0370.1816C	754620	US	11/421,447	31-May-06	7,688,967	30-Mar-10	Dynamic speed dial number mapping	Cisco Technology, Inc.	017705/0175	PATEL et al.

0370.1816i	754620-20490	WO	PCT/US07/70021	31-May-07	N/A	N/A	Dynamic speed dial number mapping	Cisco Technology, Inc.	017705/0175	PATEL et al.
0370.1817C	950129	US	11/682,179	5-Mar-07	8,102,758	24-Jan-12	Analyzing virtual private network failures	Cisco Technology, Inc.	018960/0531	MONAGHAN et al.
0370.1817i	950129-24069	WO	PCT/US08/54840	25-Feb-08	N/A	N/A	Analyzing virtual private network failures	Cisco Technology, Inc.	018960/0531	MONAGHAN et al.
0370.1818i	950972-24229	WO	PCT/US08/56458	3/11/2008	N/A	N/A	An Authenticated Correspondent Database	Cisco Technology, Inc.	019020/0835	Michael Allen THOMAS
0370.1819C	962013	US	12/703,466	2/10/2010	8,675,498	3/18/2014	System and method to provide aggregated alarm indication signals	Cisco Technology, Inc.	023921/0187	Nagi Reddy JONNALA
0370.1820C	953054	US	11/864,201	9/28/2007	8,705,738	4/22/2014	Selective security termination in next generation mobile networks	Cisco Technology, Inc.	019898/0184	GRAYSON et al.
0370.1820i	953054-24796	WO	PCT/US08/77607	9/25/2008	N/A	N/A	Selective security termination in next generation mobile networks	Cisco Technology, Inc.	019898/0184	GRAYSON et al.
0370.1821C	959341	US	11/971,066	1/8/2008	8,825,965	9/2/2014	SYSTEM AND METHODS FOR MEMORY EXPANSION	Cisco Technology, Inc.	027165/0432	MAZZOLA et al.
0370.1821i	959341-25027	WO	PCT/US2009/030441	1/8/2009	N/A	N/A	SYSTEM AND METHODS FOR MEMORY EXPANSION	Cisco Technology, Inc.	027165/0432	MAZZOLA et al.
0370.1822C	952652	US	11/948,405	11/30/2007	7,886,080	2/8/2011	Management of topology changes in layer two networks	Cisco Technology, Inc.	020337/0368	SAJASSI et al.
0370.1822i	952652-24943	WO	PCT/US08/84592	11/25/2008	N/A	N/A	Management of topology changes in layer two networks	Cisco Technology, Inc.	020337/0368	SAJASSI et al.

0370.1823C	959410	US	12/206,501	9/8/2008	7,886,103	2/8/2011	Input-output module, processing platform and method for extending a memory interface for input-output operations	Cisco Technology, Inc.	021665/0409	NISHTALA et al.
0370.1823CON	972860	US	12/986,104	1/6/2011	8,117,369	2/14/2012	Input-output module for operation in memory module socket and method for extending a memory interface for input-output operations	Cisco Technology, Inc.	021665/0409	NISHTALA et al.
0370.1823i	959410-25378	WO	PCT/US2009/056251	9/8/2009	N/A	N/A	Input-output module, processing platform and method for extending a memory interface for input-output operations	Cisco Technology, Inc.	021665/0409	NISHTALA et al.
0370.1824C	157344	US	10/293,180	11/12/2002	7,424,014	9/9/2008	System and method for local packet transport services within distributed routers	Cisco Technology, Inc.	013493/0104	MATTES et al.
0370.1824CON	972082	US	12/893,988	9/29/2010	8,687,632	4/1/2014	System and method for local packet transport services within distributed routers	Cisco Technology, Inc.	013493/0104	MATTES et al.
0370.1824DIV	958758	US	12/110,962	4/28/2008	7,843,930	11/30/2010	System and method for local packet transport services within distributed routers	Cisco Technology, Inc.	013493/0104	MATTES et al.

0370.1826C	208104	US	10/371,909	2/21/2003	7,127,602	10/24/2006	iSCSI computer boot system and method	Cisco Technology, Inc.	013810/0475	BAKKE et al.
0370.1827C	224186	US	10/607,830	6/28/2003	7,451,208	11/11/2008	Systems and methods for network address failover	Cisco Technology, Inc.	014691/0538	BAKKE et al.
0370.1828C	224204	US	10/280,161	10/25/2002	8,024,418	9/20/2011	Reserve release proxy	Cisco Technology, Inc.	013428/0438	Stephen P. DE GROOTE
0370.1829C	235799	US	10/395,292	3/24/2003	6,857,069	2/15/2005	Modified operating system boot sequence for iSCSI device support	Cisco Technology, Inc.	013906/0702	RISSMEYER et al.
0370.1830C	263016	US	10/402,199	3/28/2003	7,904,599	3/8/2011	Synchronization and auditing of zone configuration data in storage-area networks	Cisco Technology, Inc.	013928/0780	Steven James BENNETT
0370.1831C	263027	US	10/401,654	3/28/2003	7,433,300	10/7/2008	Synchronization of configuration data in storage-area networks	Cisco Technology, Inc.	013917/0099	BENNETT et al.
0370.1832C	262990	US	10/402,204	3/28/2003	7,360,072	4/15/2008	iSCSI system OS boot configuration modification	Cisco Technology, Inc.	013924/0010	SOLTIS et al.
0370.1833C	262983	US	10/395,927	3/24/2003	7,363,356	4/22/2008	Boot modification of registry data for iSCSI network boot operations	Cisco Technology, Inc.	013906/0594	RISSMEYER et al.
0370.1834C	243734	US	10/403,219	3/26/2003	7,295,572	11/13/2007	Storage router and method for routing IP datagrams between data path processors using a fibre channel switch	Cisco Technology, Inc.	013938/0327	Clayton S. HAAPALA

0370.1835C	250417	US	10/403,235	3/26/2003	7,706,316	4/27/2010	Processing an incoming packet of unknown protocol by encapsulating the packet and sending it to another processor	Cisco Technology, Inc.	013955/0062	Timothy J. KUIK
0370.1836C	263041	US	10/402,036	3/28/2003	7,231,518	6/12/2007	System and method for authenticating a storage device for use with driver software in a storage network	Cisco Technology, Inc.	013926/0157	Mark A. BAKKE
0370.1836CON	954629	US	11/736,414	4/17/2007	7,366,902	4/29/2008	System and method for authenticating a storage device for use with driver software in a storage network	Cisco Technology, Inc.	013926/0157	Mark A. BAKKE
0370.1837C	262757	US	10/403,227	3/26/2003	7,246,221	7/17/2007	Boot disk replication for network booting of remote servers	Cisco Technology, Inc.	013955/0039	SOLTIS et al.
0370.1838C2	950925	US	11/421,455	5/31/2006	8,799,764	8/5/2014	Method and system for parameterized web documents	Cisco Technology, Inc.	023180/0327	KAUSIK et al.
0370.1838CIP	684174	US	09/838,822	4/19/2001	7,139,976	11/21/2006	Method and system for parameterized web documents	Cisco Technology, Inc.	023180/0327	KAUSIK et al.
0370.1839C	660957	US	11/280,539	11/16/2005	8,260,908	9/4/2012	Techniques for sequencing system log messages	Cisco Technology, Inc.	017254/0125	CHANG et al.
0370.1840C	687628	US	11/237,081	9/28/2005	8,503,624	8/6/2013	Method and apparatus to process an incoming message	Cisco Technology, Inc.	017046/0395	SHAFFER et al.

0370.1840i	687628-23895	WO	PCT/US2006/033387	8/28/2006	N/A	4/16/2009	Method and apparatus to process an incoming message	Cisco Technology, Inc.	017046/0395	SHAFFER et al.
0370.1841C	677868	US	11/334,909	1/19/2006	7,706,741	4/27/2010	Integrated mobile communication and broadcast program reproduction device	Cisco Technology, Inc.	017484/0493	PATEL et al.
0370.1844C	556614	US	11/613,804	12/20/2006	7,706,298	4/27/2010	Route dependency selective route download	Cisco Technology, Inc.	018661/0767	FERNANDO et al.
0370.1844P	896637	US	60/756,300	1/5/2006	N/A	N/A	ROUTE DEPENDENCY SELECTIVE ROUTE DOWNLOAD	Cisco Technology, Inc.	018661/0767	FERNANDO et al.
0370.1845C	584282	US	11/351,429	2/10/2006	8,020,006	9/13/2011	Pipeline for high-throughput encrypt functions	Cisco Technology, Inc.	017573/0913	Arthur Tung-Tak LEUNG, JR.
0370.1847C	584329	US	11/379,530	4/20/2006	8,085,675	12/27/2011	Method and apparatus to test a data path in a network	Cisco Technology, Inc.	017503/0679	HOQUE et al.
0370.1848C1	832771	US	11/272,461	11/9/2005	8,010,685	8/30/2011	Method and apparatus for content classification	Cisco Technology, Inc.	017405/0106	SINGH et al.
0370.1848C2	832777	US	11/271,209	11/9/2005	7,535,909	5/19/2009	Method and apparatus to process packets in a network	Cisco Technology, Inc.	017236/0736	SINGH et al.
0370.1848C3	789922	US	11/271,133	11/9/2005	7,936,682	5/3/2011	Detecting malicious attacks using network behavior and header analysis	Cisco Technology, Inc.	017229/0905	SINGH et al.
0370.1848P	789797	US	60/522,810	11/9/2004	N/A	N/A	Detecting network attacks using resilient content and header analysis	Cisco Technology, Inc.	016925/0140	Sumeet SINGH

0370.1849C	670285	US	11/278,371	3/31/2006	8,971,511	3/3/2015	METHOD AND APPARATUS FOR ENHANCING SPEAKER SELECTION	Cisco Technology, Inc.	017404/0383	SHAFFER et al.
0370.1851C	688329	US	11/277,295	3/23/2006	8,625,749	1/7/2014	Content sensitive do-not-disturb (DND) option for a communication system	Cisco Technology, Inc.	017356/0157	JAIN et al.
0370.1852C	729424	US	11/278,903	4/6/2006	7,653,183	1/26/2010	Method and apparatus to provide data to an interactive voice response (IVR) system	Cisco Technology, Inc.	017432/0580	PATEL et al.
0370.1852i	729424-19923	WO	PCT/US07/66120	4/6/2007	N/A	10/11/2007	Method and apparatus to provide data to an interactive voice response (IVR) system	Cisco Technology, Inc.	017432/0580	PATEL et al.
0370.1853C	798130	US	11/463,254	8/8/2006	8,503,681	8/6/2013	Method and system to securely transport data encryption keys	Cisco Technology, Inc.	018074/0010	MCGREW et al.
0370.1853P	816925	US	60/733,370	11/4/2005	N/A	N/A	Encrypted key transport for secure RTP	Cisco Technology, Inc.	018074/0010	MCGREW et al.
0370.1854C	951476	US	11/556,123	11/2/2006	8,554,980	10/8/2013	Triggered notification	Cisco Technology, Inc.	018475/0189	Patrick Glen BOSE
0370.1854P	828933	US	60/733,822	11/4/2005	N/A	N/A	Third Party Notification System	Cisco Technology, Inc.	018475/0189	Patrick Glen BOSE
0370.1855C	499713	US	11/318,217	12/23/2005	7,889,712	2/15/2011	Methods and apparatus for providing loop free routing tables	Cisco Technology, Inc.	017371/0796	TALUR et al.
0370.1855P	666881	US	60/638,954	12/23/2004	N/A	N/A	Algorithm for loop free remote nexthop resolution in the Routing Table	Cisco Technology, Inc.	017371/0796	TALUR et al.

0370.1857C	702648	US	11/369,358	3/6/2006	8,347,376	1/1/2013	Techniques for distributing a new communication key within a virtual private network	Cisco Technology, Inc.	017661/0635	WEIS et al.
0370.1858C	794442	US	11/363,728	2/28/2006	7,557,806	7/7/2009	Method to protect display text from eavesdropping	Cisco Technology, Inc.	017630/0537	Mark Ka Yau NG
0370.1859C	589211	US	11/379,216	4/18/2006	8,738,761	5/27/2014	Method and system to capture and playback network activity	Cisco Technology, Inc.	017490/0156	RAISONI et al.
0370.1861C	791258	US	11/460,198	7/26/2006	8,886,934	11/11/2014	AUTHORIZING PHYSICAL ASSESS-LINKS FOR SECURE NETWORK CONNECTIONS	Cisco Technology, Inc.	018006/0617	ECKERT et al.
0370.1863i	840983-20489	WO	PCT/US07/67843	5/1/2007	N/A	11/15/2007	MANAGING CONFERENCE CALL PARTICIPANTS IN A ROSTER	Cisco Technology, Inc.	017584/0028	SHARMA et al.
0370.1864C	864240	US	11/419,583	5/22/2006	7,962,743	6/14/2011	System and method for protected spoke to spoke communication using an unprotected computer network	Cisco Technology, Inc.	017653/0121	Scott FLUHRER
0370.1865C	637495	US	11/379,920	4/24/2006	8,160,255	4/17/2012	System and method for encrypted group network communication with point-to-point privacy	Cisco Technology, Inc.	017517/0007	Scott FLUHRER
0370.1866C	765907	US	11/466,380	8/22/2006	8,442,206	5/14/2013	Method of responding to an incoming voice call	Cisco Technology, Inc.	018154/0638	KHOURI et al.
0370.1867C	724185	US	11/421,049	5/30/2006	7,899,783	3/1/2011	Monitoring data integrity	Cisco Technology, Inc.	017697/0515	XU et al.

0370.1868C	828450	US	11/460,212	7/26/2006	8,068,601	11/29/2011	Queuing and routing telephone calls	Cisco Technology, Inc.	018006/0665	SHAFFER et al.
0370.1868DIV	976982	US	13/283,273	10/27/2011	8,320,876	11/27/2012	Queuing and routing telephone calls	Cisco Technology, Inc.	018006/0665	SHAFFER et al.
0370.1869C	784615	US	11/277,058	3/21/2006	8,547,855	10/1/2013	Method and apparatus to schedule multiple probes for active or passive monitoring of networks	Cisco Technology, Inc.	017338/0219	ZINGALE et al.
0370.1871C	848078	US	11/379,044	4/17/2006	8,065,292	11/22/2011	Generating an index for a network search engine	Cisco Technology, Inc.	017863/0582	Gilbert YU
0370.1872C	829839	US	11/279,714	4/13/2006	7,586,877	9/8/2009	Method and system to determine and communicate the presence of a mobile device in a predefined zone	Cisco Technology, Inc.	017470/0278	GITS et al.
0370.1873C	749243	US	11/561,286	11/17/2006	7,978,599	7/12/2011	Method and system to identify and alleviate remote overload	Cisco Technology, Inc.	018533/0735	STONE et al.
0370.1874C	821884	US	11/460,215	7/26/2006	7,961,851	6/14/2011	Method and system to select messages using voice commands and a telephone user interface	Cisco Technology, Inc.	018006/0682	BRAN et al.
0370.1875C	923590	US	11/460,933	7/28/2006	8,255,535	8/28/2012	Method and system to generate execution-based scheduling signature for an application	Cisco Technology, Inc.	018021/0259	DINI et al.
0370.1876C	838969	US	11/468,909	8/31/2006	8,019,893	9/13/2011	Method and device to process network data	Cisco Technology, Inc.	018193/0953	BALESTRIERE et al.

0370.1876CON	975232	US	13/186,190	7/19/2011	8,386,645	2/26/2013	Method and device to process network data	Cisco Technology, Inc.	018193/0953	BALESTRIERE et al.
0370.1879C	850162	US	11/461,386	7/31/2006	8,670,537	3/11/2014	Adjusting audio volume in a conference call environment	Cisco Technology, Inc.	018037/0245	METZGER et al.
0370.1880C	857963	US	11/558,799	11/10/2006	8,311,197	11/13/2012	Method and system for allocating, revoking and transferring resources in a conference system	Cisco Technology, Inc.	018508/0123	SHAFFER et al.
0370.1881C	871155	US	11/466,388	8/22/2006	7,885,674	2/8/2011	Determining which channels are accessible by a communication device in a push-to-talk communication network	Cisco Technology, Inc.	018154/0647	SHAFFER et al.
0370.1882C	950099	US	11/466,390	8/22/2006	8,630,190	1/14/2014	Method and system to identify a network device associated with poor QoS	Cisco Technology, Inc.	018154/0661	GOYAL et al.
0370.1883C	951231	US	11/558,809	11/10/2006	7,764,973	7/27/2010	Controlling playback of recorded media in a push-to-talk communication environment	Cisco Technology, Inc.	018508/0163	SHAFFER et al.
0370.1884C	950567	US	11/625,552	1/22/2007	8,427,959	4/23/2013	Bandwidth based selection for routing data	Cisco Technology, Inc.	018786/0447	ALVAREZ et al.
0370.1885C	949903	US	11/619,941	1/4/2007	7,813,843	10/12/2010	Ad-hoc mobile IP network for intelligent transportation system	Cisco Technology, Inc.	018709/0926	PATEL et al.
0370.1885CN2	976613	US	13/241,966	9/23/2011	8,311,726	11/13/2012	Ad-hoc mobile IP network for intelligent transportation system	Cisco Technology, Inc.	018709/0926	PATEL et al.

0370.1885CN3	982111	US	13/620,228	9/14/2012	8,620,491	12/31/2013	Ad-hoc mobile IP network for intelligent transportation system	Cisco Technology, Inc.	018709/0926	PATEL et al.
0370.1885CN4	990498	US	14/095,653	12/3/2013	8,938,353	1/20/2015	AD-HOC MOBILE IP NETWORK FOR INTELLIGENT TRANSPORTATION SYSTEM	Cisco Technology, Inc.	018709/0926	PATEL et al.
0370.1885CON	972407	US	12/902,012	10/11/2010	8,036,782	10/11/2011	Ad-hoc mobile IP network for intelligent transportation system	Cisco Technology, Inc.	018709/0926	PATEL et al.
0370.1886i	950760-23698	WO	PCT/US2007/080581	10/5/2007	N/A	4/24/2008	INDICATING OR REMARKING OF A DSCP FOR RTP OF A FLOW (CALL) TO AND FROM A SERVER	Cisco Technology, Inc.	019241/0321	POLK et al.
0370.1887C	951418	US	11/668,334	1/29/2007	7,953,867	5/31/2011	Session description protocol (SDP) capability negotiation	Cisco Technology, Inc.	018819/0409	Flemming Stig ANDREASEN
0370.1887P	952995	US	60/864,916	11/8/2006	N/A	N/A	SESSION DESCRIPTION PROTOCOL (SDP) CAPABILITY NEGOTIATION	Cisco Technology, Inc.	018819/0409	Flemming Stig ANDREASEN
0370.1888C	951409	US	11/559,579	11/14/2006	7,848,337	12/7/2010	Auto probing endpoints for performance and fault management	Cisco Technology, Inc.	018517/0184	WENG et al.
0370.1888CON	972639	US	12/950,916	11/19/2010	8,451,745	5/28/2013	Auto probing endpoints for performance and fault management	Cisco Technology, Inc.	018517/0184	WENG et al.
0370.1889C	892709	US	11/673,296	2/9/2007	7,930,386	4/19/2011	Network discovery and dynamic adaptation of insufficient QoS resources	Cisco Technology, Inc.	018876/0799	DAVIS et al.

0370.1890C	950831	US	11/691,385	3/26/2007	8,305,895	11/6/2012	Adaptive cross-network message bandwidth allocation by message servers	Cisco Technology, Inc.	019065/0913	CHANG et al.
0370.1890CON	981627	US	13/598,456	8/29/2012	8,948,010	2/3/2015	Adaptive cross-network message bandwidth allocation by message servers	Cisco Technology, Inc.	019065/0913	CHANG et al.
0370.1891C	951284	US	11/694,334	3/30/2007	8,331,972	12/11/2012	Resolving potential conflicts in interoperability communications	Cisco Technology, Inc.	019095/0108	SHAFFER et al.
0370.1892C	951461	US	11/691,756	3/27/2007	8,619,642	12/31/2013	Controlling a jitter buffer	Cisco Technology, Inc.	019070/0969	SHAFFER et al.
0370.1893C	733898	US	11/871,508	10/12/2007	8,625,610	1/7/2014	System and method for improving spoke to spoke communication in a computer network	Cisco Technology, Inc.	020138/0714	ASATI et al.
0370.1894C	952634	US	11/756,465	5/31/2007	7,752,504	7/6/2010	System diagnostics with dynamic contextual information of events	Cisco Technology, Inc.	019474/0894	CHANG et al.
0370.1895C	952785	US	11/857,633	9/19/2007	7,865,774	1/4/2011	Multiprocessor core dump retrieval	Cisco Technology, Inc.	020058/0793	SUNAVALA et al.
0370.1896C	952336	US	11/954,831	12/12/2007	8,346,961	1/1/2013	System and method for using routing protocol extensions for improving spoke to spoke communication in a computer network	Cisco Technology, Inc.	021071/0618	ASATI et al.
0370.1898C	953474	US	11/769,601	6/27/2007	8,115,777	2/14/2012	Enhancing contact center interactions for people having impaired senses	Cisco Technology, Inc.	019672/0374	JAIN et al.

0370.1899C	952840	US	12/039,507	2/28/2008	7,965,174	6/21/2011	Integrated building device monitoring network	Cisco Technology, Inc.	020904/0304	WONG et al.
0370.1901C	953037	US	11/856,461	9/17/2007	8,160,112	4/17/2012	Buffering a media stream	Cisco Technology, Inc.	020037/0362	SHAFFER et al.
0370.1902C	952697	US	11/949,561	12/3/2007	8,121,130	2/21/2012	Determining an optimal route advertisement in a reactive routing environment	Cisco Technology, Inc.	020345/0007	WHITE et al.
0370.1902CON	977444	US	13/345,003	1/6/2012	8,705,539	4/22/2014	Determining a route advertisement in a reactive routing environment	Cisco Technology, Inc.	020345/0007	WHITE et al.
0370.1903C	955231	US	10/721,753	11/26/2003	7,890,995	2/15/2011	System and method for remote management of communications networks	Cisco Technology, Inc.	020860/0257	SHIM et al.
0370.1904C	955099	US	10/727,976	12/5/2003	7,450,568	11/11/2008	System and method for managing a VoIP network	Cisco Technology, Inc.	020860/0257	SHIM et al.
0370.1905C	955234	US	11/125,323	5/10/2005	7,577,239	8/18/2009	Tracking and controlling the impact of unwanted messages	Cisco Technology, Inc.	020860/0257	SHIM et al.
0370.1905P	955233	US	60/569,239	5/10/2004	N/A	N/A	System and method for blocking VoIP messages	Cisco Technology, Inc.	020860/0257	SHIM et al.
0370.1907C	955235	US	10/941,070	9/15/2004	7,805,517	9/28/2010	System and method for load balancing a communications network	Cisco Technology, Inc.	020860/0257	SHIM et al.
0370.1910C	955252	US	11/436,195	5/18/2006	7,965,650	6/21/2011	Method and system for quality monitoring of media over internet protocol (MOIP)	Cisco Technology, Inc.	020860/0257	BYUN et al.

0370.1911C	955256	US	11/217,421	9/2/2005	7,702,087	4/20/2010	Method and apparatus for activating and managing VoIP phone with RFID	Cisco Technology, Inc.	020860/0257	SHIM et al.
0370.1913C	951330	US	11/842,460	8/21/2007	8,792,487	7/29/2014	COMMUNICATION PATH SELECTION	Cisco Technology, Inc.	020037/0640	KHALID et al.
0370.1914C	955251	US	11/403,202	4/13/2006	7,894,488	2/22/2011	Apparatus and method for monitoring quality metrics associated with a wireless network	Cisco Technology, Inc.	020860/0257	Choon B. SHIM
0370.1914CON	972861	US	12/971,530	12/17/2010	8,559,327	10/15/2013	Apparatus and method for monitoring quality metrics associated with a wireless network	Cisco Technology, Inc.	020860/0257	Choon B. SHIM
0370.1915C	953020	US	12/013,176	1/11/2008	8,711,729	4/29/2014	Host route convergence based on sequence values	Cisco Technology, Inc.	020408/0042	KATUKAM et al.
0370.1916C	952311	US	11/951,161	12/5/2007	8,171,494	5/1/2012	Providing identity to a portal with a redirect	Cisco Technology, Inc.	020559/0483	CHAMPAGNE et al.
0370.1917C	955162	US	12/126,424	5/23/2008	8,391,185	3/5/2013	Method to transport bidir PIM over a multiprotocol label switched network	Cisco Technology, Inc.	021152/0697	WIJNANDS et al.
0370.1917P	955174	US	60/932,358	5/29/2007	N/A	N/A	METHOD TO TRANSPORT BIDIR PIM OVER A MULTIPROTOCOL LABEL SWITCHED NETWORK	Cisco Technology, Inc.	021152/0697	WIJNANDS et al.
0370.1918C	955253	US	11/555,484	11/1/2006	8,243,599	8/14/2012	Method and apparatus for high resolution passive network latency measurement	Cisco Technology, Inc.	020860/0257	BECKER et al.

0370.1919C	955254	US	11/565,181	11/30/2006	8,218,458	7/10/2012	Method and apparatus for voice conference monitoring	Cisco Technology, Inc.	020860/0257	FLYNN et al.
0370.1920C	953291	US	11/946,673	11/28/2007	7,852,774	12/14/2010	User datagram protocol traceroute probe extension	Cisco Technology, Inc.	020345/0001	SHEN et al.
0370.1921C	950042	US	11/853,610	9/11/2007	8,077,713	12/13/2011	Dynamic update of a multicast tree	Cisco Technology, Inc.	020088/0820	VASSEUR et al.
0370.1922C	953989	US	12039534	2/28/2008	8,731,047	5/20/2014	Mixing of video content	Cisco Technology, Inc.	021011/0774	BAUGHER et al.
0370.1923C	954972	US	12/142,245	6/19/2008	7,969,983	6/28/2011	Network Scaling with Summarized Internet Protocol Label Switched Paths	Cisco Technology, Inc.	021152/0718	GUICHARD et al.
0370.1923P	955480	US	60/947,318	6/29/2007	N/A	N/A	METHOD AND APPARATUS TO SCALE IP LABEL SWITCHED PATHS	Cisco Technology, Inc.	021152/0718	GUICHARD et al.
0370.1924C	955360	US	12/147,265	6/26/2008	8,565,248	10/22/2013	Pure control-plane approach for on-path connection admission control operations in multiprotocol label switching virtual private networks	Cisco Technology, Inc.	021190/0827	LE FAUCHEUR et al.
0370.1925C	954759	US	12/036,653	2/25/2008	7,808,888	10/5/2010	Network fault correlation in multi-route configuration scenarios	Cisco Technology, Inc.	020768/0774	KIBEL et al.
0370.1926C	955665	US	12/111,336	4/29/2008	8,238,338	8/7/2012	Interior gateway protocol summarization preserving internet protocol reachability information	Cisco Technology, Inc.	021071/0540	SWALLOW et al.

0370.1926P	956067	US	60/972659	9/14/2007	N/A	N/A	IGP Summarization Preserving IP Reachability Information	Cisco Technology, Inc.	021071/0540	SWALLOW et al.
0370.1927C	954654	US	12044196	3/7/2008	7,839,767	11/23/2010	Path reroute in a computer network	Cisco Technology, Inc.	020786/0615	Jean-Philippe Marcel VASSEUR
0370.1928C	954760	US	11/969,045	1/3/2008	8,385,228	2/26/2013	Communication paradigm switching based on link quality information	Cisco Technology, Inc.	022350/0186	SHAFFER et al.
0370.1929C	955472	US	12049108	3/14/2008	8,537,743	9/17/2013	Priority-based multimedia stream transmissions	Cisco Technology, Inc.	020797/0522	BARAVE et al.
0370.1930C	956427	US	10/751,340	1/3/2004	8,036,143	10/11/2011	Method and apparatus for device communications	Cisco Technology, Inc.	021222/0619	LOVY et al.
0370.1930CON	976456	US	13/234,711	9/16/2011	8,797,919	8/5/2014	Methods and apparatuses for device communications	Cisco Technology, Inc.	021222/0619	LOVY et al.
0370.1930P	956425	US	60/437,896	1/3/2003	N/A	N/A	System for controlling networked multimedia devices	Cisco Technology, Inc.	021222/0619	LOVY et al.
0370.1931C	953048	US	11/967,931	12/31/2007	8,423,668	4/16/2013	Link state protocol routing message containment	Cisco Technology, Inc.	020700/0407	YADAV et al.
0370.1932C	950258	US	12050686	3/18/2008	8,259,584	9/4/2012	Dynamic reroute of network traffic	Cisco Technology, Inc.	020831/0870	VASSEUR et al.
0370.1932CON	981451	US	13/598,350	8/29/2012	8,964,564	2/24/2015	DYNAMIC REROUTE OF NETWORK TRAFFIC	Cisco Technology, Inc.	020831/0870	VASSEUR et al.
0370.1933C	956158	US	12/188,982	8/8/2008	8,994,830	3/31/2015	ACCESS TO VIDEO STREAMS ON MOBILE COMMUNICATION DEVICES	Cisco Technology, Inc.	021527/0903	SHAFFER et al.

0370.1934C	956180	US	12/188,993	8/8/2008	8,107,403	1/31/2012	Method and apparatus for unicast and multicast media processing	Cisco Technology, Inc.	021495/0925	BARAVE et al.
0370.1935C	955710	US	12/198,689	8/26/2008	8,874,056	10/28/2014	IDENTIFYING CHANNELS IN A COMMUNICATION NETWORK	Cisco Technology, Inc.	022476/0443	SEN et al.
0370.1936C	951559	US	12/061,233	4/2/2008	7,895,320	2/22/2011	Method and system to monitor network conditions remotely	Cisco Technology, Inc.	021103/0679	OGGERINO et al.
0370.1937C	956570	US	09/001,850	12/31/1997	6,711,622	3/23/2004	Video and audio streaming for multiple users	Cisco Technology, Inc.	022343/0340	FULLER et al.
0370.1937CIP	956578	US	09/565,563	5/4/2000	6,732,183	5/4/2004	Video and audio streaming for multiple users	Cisco Technology, Inc.	022343/0340	John J. GRAHAM
0370.1937CON	958723	US	10/783,187	2/20/2004	7,325,066	1/29/2008	Video and audio streaming for multiple users	Cisco Technology, Inc.	022346/0320	FULLER et al.
0370.1937CP2	958725	US	10/783,075	2/20/2004	7,310,680	12/18/2007	Video and audio streaming for multiple users	Cisco Technology, Inc.	022346/0320	John J. GRAHAM
0370.1938C	958727	US	11/318,067	12/23/2005	8,595,377	11/26/2013	Apparatus and method for flexible delivery of multiple digital video streams	Cisco Technology, Inc.	022346/0320	APGAR et al.
0370.1939C	958032	US	12/337,528	12/17/2008	8,255,932	8/28/2012	Application of an embedded instrumentation interface definition language	Cisco Technology, Inc.	022160/0904	CLEMM et al.
0370.1939CON	980948	US	13/588,866	8/17/2012	8,954,998	2/10/2015	Application of an Embedded Instrumentation Interface Definition Language	Cisco Technology, Inc.	022160/0904	CLEMM et al.
0370.1940C	554700	US	11/073,046	3/4/2005	8,332,485	12/11/2012	Lock optimization and lock prediction approaches for reducing client-server messages	Cisco Technology, Inc.	016358/0006	BEN-SHAUL et al.

0370.1941C	956043	US	12/186,954	8/6/2008	8,554,883	10/8/2013	Apparatus and method for sharing a generic configuration across a group of network devices	Cisco Technology, Inc.	022349/0771	Ganesh Chennimalai SANKARAN
0370.1941CON	990615	US	14/032,281	9/20/2013	8,799,427	8/5/2014	APPARATUS AND METHOD FOR SHARING A GENERIC CONFIGURATION ACROSS A GROUP OF NETWORK DEVICES	Cisco Technology, Inc.	022349/0771	Ganesh Chennimalai SANKARAN
0370.1945C	958392	US	12262746	10/31/2008	8,315,744	11/20/2012	Distributing power to networked devices	Cisco Technology, Inc.	021913/0313	CHATTERTON et al.
0370.1947C	958395	US	12/371,285	2/13/2009	8,799,474	8/5/2014	APPARATUS AND METHOD TO ALLOCATE LIMITED RESOURCES	Cisco Technology, Inc.	022401/0861	CHATTERTON et al.
0370.1948C	956553	US	12/326,756	12/2/2008	8,428,247	4/23/2013	Echo mitigation in a conference call	Cisco Technology, Inc.	023623/0653	FRAUENTHAL et al.
0370.1949C	957364	US	12336469	12/16/2008	7,969,867	6/28/2011	Backup route generation in border gateway protocol	Cisco Technology, Inc.	022136/0782	ROSEN et al.
0370.1950C	958855	US	12/347950	12/31/2008	8,242,926	8/14/2012	Energy-saving status indicator	Cisco Technology, Inc.	022201/0274	BYERS et al.
0370.1953C	523872	US	11/065,871	2/25/2005	7,710,865	5/4/2010	Disaster recovery for active-standby data center using route health and BGP	Cisco Technology, Inc.	016337/0204	NASEH et al.
0370.1953CON	961336	US	12/420,241	4/8/2009	8,243,588	8/14/2012	Disaster recovery for active-standby data center using route health and BGP	Cisco Technology, Inc.	016337/0204	NASEH et al.

0370.1954C	959152	US	12/476,914	6/2/2009	8,553,527	10/8/2013	System and method for dynamically assigning values in a network	Cisco Technology, Inc.	022860/0332	SHAND et al.
0370.1955C	958399	US	10/815,008	3/30/2004	7,702,718	4/20/2010	Providing enterprise information	Cisco Technology, Inc.	021796/0475	BATRA et al.
0370.1955i	958399-24276	WO	PCT/US2005/010382	3/25/2005	N/A	10/20/2005	Providing enterprise information	Cisco Technology, Inc.	021796/0475	BATRA et al.
0370.1956C	959273	US	12/414,425	3/30/2009	8,295,181	10/23/2012	Transfer of network traffic for multi-homed devices	Cisco Technology, Inc.	022604/0957	BRADFORD et al.
0370.1957C	959587	US	12/415,926	3/31/2009	8,605,603	12/10/2013	Route convergence based on ethernet operations, administration, and maintenance protocol	Cisco Technology, Inc.	022612/0098	HILL et al.
0370.1958C	610357	US	12/491,034	6/24/2009	8,121,136	2/21/2012	Dynamic discovery mechanisms via inter-domain routing protocol	Cisco Technology, Inc.	024062/0758	ASATI et al.
0370.1958CON	977264	US	13/365,597	2/3/2012	8,897,311	11/25/2014	DYNAMIC DISCOVERY MECHANISMS VIA INTER-DOMAIN ROUTING PROTOCOL	Cisco Technology, Inc.	024062/0758	ASATI et al.
0370.1959C	954458	US	12/467,918	5/19/2009	8,867,349	10/21/2014	REGULATION OF NETWORK TRAFFIC IN VIRTUAL PRIVATE NETWORKS	Cisco Technology, Inc.	022777/0579	MARTINI et al.
0370.1960C	960480	US	12/509,140	7/24/2009	8,130,675	3/6/2012	Carrier ethernet service discovery, correlation methodology and apparatus	Cisco Technology, Inc.	023081/0634	RAGHAVENDRA N et al.

0370.1961C	960100	US	12/536,427	8/5/2009	8,503,329	8/6/2013	Signaling of attachment circuit status and automatic discovery of inter-chassis communication peers	Cisco Technology, Inc.	023189/0614	MULLOOLY et al.
0370.1963C	523875	US	11/066,955	2/25/2005	7,769,886	8/3/2010	Application based active-active data center network using route health injection and IGP	Cisco Technology, Inc.	016342/0321	NASEH et al.
0370.1964C	78881	US	09/752,075	12/29/2000	7,085,279	8/1/2006	Method and apparatus for carrying telephony network traffic over an ATM network	Cisco Technology, Inc.	012246/0269	KUMAR et al.
0370.1964DIV	795193	US	11/258,695	10/25/2005	7,848,313	12/7/2010	Method and apparatus for carrying telephony network traffic over an ATM network	Cisco Technology, Inc.	012246/0269	KUMAR et al.
0370.1966C	85361	US	09/749,178	12/26/2000	7,039,014	5/2/2006	Network-wide connection-based debug mechanism	Cisco Technology, Inc.	011421/0482	KRISHNAMURTHY et al.
0370.1966CON	892575	US	11/359,843	2/21/2006	7,848,245	12/7/2010	Network-wide connection-based debug mechanism	Cisco Technology, Inc.	011421/0482	KRISHNAMURTHY et al.
0370.1968C	12341	US	09/265,508	3/9/1999	7,006,493	2/28/2006	A virtual voice port configured to connect a switched voice call to a permanent voice call	Cisco Technology, Inc.	009933/0968	TASKER et al.

0370.1969C	155805	US	09/496,990	2/2/2000	7,673,057	3/2/2010	Hybrid connection admission control using combined model-based and measurement-based estimators	Cisco Technology, Inc.	010537/0609	YIP et al.
0370.1970C	950995	US	11/615,191	12/22/2006	8,161,119	4/17/2012	Network device provided spam reporting button for instant messaging	Cisco Technology, Inc.	018672/0226	PIRZADA et al.
0370.1971C	950828	US	11/669,636	1/31/2007	7,843,856	11/30/2010	Determination of available service capacity in dynamic network access domains	Cisco Technology, Inc.	018833/0145	RAMAKRISHNAN et al.
0370.1972C	949744	US	11/559,581	11/14/2006	8,065,438	11/22/2011	Modification to AS.sub.--path elements	Cisco Technology, Inc.	018517/0291	MEHTA et al.
0370.1973C	950967	US	11/673,261	2/9/2007	8,046,415	10/25/2011	Throttling of mass mailings using network devices	Cisco Technology, Inc.	018876/0371	SZETO et al.
0370.1974C	955180	US	12/241,445	9/30/2008	7,916,729	3/29/2011	Automatic RD rewrite technique to achieve fast convergence in inter-as networks	Cisco Technology, Inc.	021783/0189	MOHAPATRA et al.
0370.1975C	952278	US	11/748,314	5/14/2007	8,205,255	6/19/2012	Anti-content spoofing (ACS)	Cisco Technology, Inc.	019468/0672	BENEA et al.
0370.1975i	952278-24437	WO	PCT/US08/63386	5/12/2008	N/A	2/19/2009	Anti-content spoofing (ACS)	Cisco Technology, Inc.	019468/0672	BENEA et al.
0370.1976C	949889	US	11/427,696	6/29/2006	7,873,833	1/18/2011	Detection of frequent and dispersed invariants	Cisco Technology, Inc.	018154/0209	SINGH et al.
0370.1976DIV	972899	US	12/956,725	11/30/2010	8,185,745	5/22/2012	Detection of frequent and dispersed invariants	Cisco Technology, Inc.	018154/0209	SINGH et al.
0370.1976i	949889-22649	WO	PCT/US07/71560	6/19/2007	N/A	1/3/2008	Detection of frequent and dispersed invariants	Cisco Technology, Inc.	018154/0209	SINGH et al.

0370.1977C	950312	US	11/563,730	11/28/2006	8,484,733	7/9/2013	Messaging security device	Cisco Technology, Inc.	018555/0806	PIRZADA et al.
0370.1977i	950312-23849	WO	PCT/US07/85597	11/27/2007	N/A	10/23/2008	Messaging security device	Cisco Technology, Inc.	018555/0806	PIRZADA et al.
0370.1978C	572047	US	11/669799	1/31/2007	8,745,179	6/3/2014	Managing Multiple Application Configuration Versions in a Heterogeneous Network	Cisco Technology, Inc.	018835/0628	RAGHAVAN et al.
0370.1981C	956142	US	12/062,292	4/3/2008	8,531,447	9/10/2013	Reactive virtual environment	Cisco Technology, Inc.	020792/0564	WALKER et al.
0370.1981CON	990331	US	14/014,853	8/30/2013	8,817,022	8/26/2014	Reactive Virtual Environment	Cisco Technology, Inc.	020792/0564	WALKER et al.
0370.1982C	955799	US	12/036,906	2/25/2008	8,473,519	6/25/2013	Unified communication audit tool	Cisco Technology, Inc.	020557/0086	SIDDIQUI et al.
0370.1982CON	986777	US	13/921,561	6/19/2013	8,959,074	2/17/2015	UNIFIED COMMUNICATION AUDIT TOOL	Cisco Technology, Inc.	020557/0086	SIDDIQUI et al.
0370.1984C	961724	US	12/709,271	2/19/2010	8,233,479	7/31/2012	Protocol independent multicast in a point-to-multipoint network	Cisco Technology, Inc.	023965/0620	WIJNANDS et al.
0370.1985C	969950	US	12/965,435	12/10/2010	8,553,533	10/8/2013	System and method for providing improved failover performance for pseudowires	Cisco Technology, Inc.	025592/0072 and 026533/0627	TAYLOR et al.
0370.1985i	969950-31749	WO	PCT/US2011/064245	12/9/2011	N/A	6/14/2012	System and method for providing improved failover performance for pseudowires	Cisco Technology, Inc.	025592/0072 and 026533/0627	TAYLOR et al.
0370.1986C	975426	US	13/366,987	2/6/2012	8,953,770	2/10/2015	RETURNING MISSED PHONE CALLS	Cisco Technology, Inc.	027716/0142	Kumar K.A. PRADEEP

0370.1988C	976640	US	13/419,232	3/13/2012	8,893,137	11/18/2014	TRANSACTION-BASED SHARED MEMORY PROTECTION FOR HIGH AVAILABILITY ENVIRONMENTS	Cisco Technology, Inc.	027857/0834	Paul Jacques THERRIEN
0370.1989C	977499	US	13/565,087	8/2/2012	8,891,375	11/18/2014	SYSTEM AND METHOD FOR VIRTUAL ETHERNET INTERFACE BINDING	Cisco Technology, Inc.	028710/0233	WANG et al.
0370.1989i	977499-37612	WO	PCT/US2013/051835	7/24/2013	N/A	2/6/2014	SYSTEM AND METHOD FOR VIRTUAL ETHERNET INTERFACE BINDING	Cisco Technology, Inc.	028710/0233	WANG et al.
0370.1990C	977660	US	13/568,162	8/7/2012	8,792,502	7/29/2014	DUPLICATE MAC ADDRESS DETECTION	Cisco Technology, Inc.	028735/0130	RAJAMANICKAM et al.
0370.1994C	983506	US	13/968,792	8/16/2013	9,007,221	4/14/2015	LIQUID COOLING OF RACK-MOUNTED ELECTRONIC EQUIPMENT	Cisco Technology, Inc.	032515/0263	ZEIGHAMI et al.
0370.1997C	985383	US	10/170,848	6/11/2002	7,370,096	5/6/2008	Methods and systems to generate and implement a changeover sequence to reconfigure a connection-oriented network	Cisco Technology, Inc.	031950/0173	GOUS et al.
0370.1997CON	985384	US	11/927,956	10/30/2007	7,958,209	6/7/2011	Methods and systems to generate and implement a changeover sequence to reconfigure a connection-oriented network	Cisco Technology, Inc.	031990/0173	GOUS et al.

0370.1997i	985382-37318	WO	PCT/US2002/018707	6/11/2002	N/A	12/27/2002	METHOD AND SYSTEM FOR NETWORK CONTROL	Cisco Technology, Inc.	031990/0173	GOUS et al.
0370.1997P	985382	US	60/298,489	6/14/2001	N/A	N/A	METHOD AND SYSTEM FOR NETWORK CONTROL	Cisco Technology, Inc.	031990/0173	GOUS et al.
0370.2000i	985387-37319	WO	PCT/US2003/033116	10/17/2003	N/A	4/29/2004	METHOD AND SYSTEM FOR TRAFFIC ENGINEERING IN AN IP NETWORK	Cisco Technology, Inc.	031990/0173	Alan GOUS
0370.2001C	985388	US	10/937,988	9/9/2004	7,505,413	3/17/2009	Methods and systems to perform traffic engineering in a metric-routed network	Cisco Technology, Inc.	031990/0173	Alan Thornton GOUS
0370.2001DIV	985389	US	12/023,957	1/31/2008	7,782,773	8/24/2010	Metric optimization for traffic engineering in a metric-routed network	Cisco Technology, Inc.	031990/0173	Alan Thornton GOUS
0370.2003C	985392	US	11/341,057	1/27/2006	7,734,813	6/8/2010	Method and system for communicating predicted network behavior between interconnected networks	Cisco Technology, Inc.	031990/0173	GOUS et al.
0370.2003i	985391-37325	WO	PCT/US2006/003168	1/27/2006	N/A	8/3/2006	METHOD AND SYSTEM FOR COMMUNICATING MODELS OF NETWORK BEHAVIOR BETWEEN NETWORKS	Cisco Technology, Inc.	031990/0173	GOUS et al.
0370.2003P	985391	US	60/647,900	1/28/2005	N/A	N/A	METHOD AND SYSTEM FOR COMMUNICATING MODELS OF NETWORK BEHAVIOR BETWEEN NETWORKS	Cisco Technology, Inc.	031990/0173	GOUS et al.

0370.2006C	959332	US	11/749,639	5/16/2007	7,752,360	7/6/2010	Method and system to map virtual PCIe I/O devices and resources to a standard I/O bus	Cisco Technology, Inc.	027165/0432	Michael GALLES
0370.2007i	959333-25169	WO	PCT/US2009/037551	3/18/2009	N/A	9/24/2009	METHOD AND SYSTEM TO ADJUST CN CONTROL LOOP PARAMETERS AT A CONGESTION POINT	Cisco Technology, Inc.	027165/0432	RIVERS et al.
0370.2008P	959334	US	60/941,510	6/1/2007	N/A	N/A	APPARATUS AND METHOD FOR APPLYING NETWORK POLICY TO COMMUNICATIONS ORIGINATING AT OPERATING SYSTEM VIRTUAL INTERFACES	Cisco Technology, Inc.	027165/0432	RIVERS et al.
0370.2009C	959336	US	11/762,575	6/13/2007	8,661,518	2/25/2014	N-port ID virtualization (NPIV) proxy module, NPIV proxy switching system and methods	Cisco Technology, Inc.	027230/0020	DODDAPANENI et al.
0370.2010C	959337	US	11/972,055	1/10/2008	7,773,519	8/10/2010	Method and system to manage network traffic congestion	Cisco Technology, Inc.	027230/0020	PRABHAKAR et al.
0370.2010CON	971465	US	12/851,353	8/5/2010	8,477,615	7/2/2013	Method and system to manage network traffic congestion	Cisco Technology, Inc.	027230/0020	PRABHAKAR et al.
0370.2010i	959337-25204	WO	PCT/US2009/039784	4/7/2009	N/A	10/14/2010	Method and system to manage network traffic congestion	Cisco Technology, Inc.	027230/0020	PRABHAKAR et al.

0370.2011C	959338	US	11/924,274	10/25/2007	8,407,364	3/26/2013	Apparatus and method for providing a congestion measurement in a network	Cisco Technology, Inc.	027165/0432	PRABHAKAR et al.
0370.2012C	959340	US	12/140,224	6/16/2008	8,321,908	11/27/2012	Apparatus and method for applying network policy at a network device	Cisco Technology, Inc.	027165/0432	GAI et al.
0370.2012P	959339	US	60/944,443	6/15/2007	N/A	N/A	APPARATUS AND METHOD FOR APPLYING NETWORK POLICY AT A NETWORK DEVICE	Cisco Technology, Inc.	027165/0432	GAI et al.
0370.2013C	959342	US	11/971,080	1/8/2008	8,621,132	12/31/2013	System and methods for memory expansion	Cisco Technology, Inc.	027165/0432	MAZZOLA et al.
0370.2014C	959343	US	11/971,091	1/8/2008	8,407,394	3/26/2013	System and methods for memory expansion	Cisco Technology, Inc.	027165/0432	MAZZOLA et al.
0370.2015C	959344	US	11/945,917	11/27/2007	8,170,042	5/1/2012	Transmit-side scaler and method for processing outgoing information packets using thread-based queues	Cisco Technology, Inc.	027165/0432	Shrijeet MUKHERJEE
0370.2015CON	979373	US	13/457,796	4/27/2012	8,594,113	11/26/2013	Transmit-side scaler and method for processing outgoing information packets using thread-based queues	Cisco Technology, Inc.	027165/0432	Shrijeet MUKHERJEE

0370.2015i	959344-25202	WO	PCT/US2009/039786	4/7/2009	N/A	10/14/2010	Transmit-side scaler and method for processing outgoing information packets using thread-based queues	Cisco Technology, Inc.	027165/0432	Shrijeet MUKHERJEE
0370.2016C	959345	US	11/933,790	11/1/2007	7,904,692	3/8/2011	Iommu with translation request management and methods for managing translation requests	Cisco Technology, Inc.	027392/0917	MUKHERJEE et al.
0370.2016CON	972797	US	12/986,114	1/6/2011	8,086,821	12/27/2011	Input-output memory management unit (IOMMU) and method for tracking memory pages during virtual-machine migration	Cisco Technology, Inc.	027392/0917	MUKHERJEE et al.
0370.2016i	959345-25203	WO	PCT/US2009/039790	4/7/2009	N/A	10/14/2010	Iommu with translation request management and methods for managing translation requests	Cisco Technology, Inc.	027392/0917	MUKHERJEE et al.
0370.2017C	959407	US	12/722,431	3/11/2010	8,798,058	8/5/2014	PROVIDING FIBRE CHANNEL SERVICES AND FORWARDING FIBRE CHANNEL OVER ETHERNET FRAMES	Cisco Technology, Inc.	024435/0702	James Paul RIVERS
0370.2017i	959407-29535	WO	PCT/US2010/027036	3/11/2010	N/A	9/16/2010	PROVIDING FIBRE CHANNEL SERVICES AND FORWARDING FIBRE CHANNEL OVER ETHERNET FRAMES	Cisco Technology, Inc.	024435/0702	James Paul RIVERS

0370.2017P	961070	US	61/159,603	3/12/2009	N/A	N/A	SYSTEMS AND METHODS FOR PROVIDING FIBRE CHANNEL SERVICES	Cisco Technology, Inc.	024435/0702	James Paul RIVERS
0370.2018C	959408	US	12/641,142	12/17/2009	8,325,602	12/4/2012	Method and system to manage network traffic congestion in networks with link layer flow control	Cisco Technology, Inc.	024033/0975	RIVERS et al.
0370.2018P	960541	US	61/138,767	12/18/2008	N/A	N/A	METHOD AND SYSTEM TO MANAGE NETWORK TRAFFIC CONGESTION IN NETWORKS WITH LINK LAYER FLOW CONTROL	Cisco Technology, Inc.	024033/0975	RIVERS et al.
0370.2019C	959409	US	12/634,367	12/9/2009	8,689,017	4/1/2014	Server power manager and method for dynamically managing server power consumption	Cisco Technology, Inc.	023647/0833	Satyanarayana NISHTALA
0370.2019P	961071	US	61/159,617	3/12/2009	N/A	N/A	SERVER POWER MANAGER AND METHOD FOR DYNAMICALLY MANAGING SERVER POWER CONSUMPTION	Cisco Technology, Inc.	023647/0833	Satyanarayana NISHTALA
0370.2023C	9904	US	08/535,347	9/28/1995	6,185,222	2/6/2001	An asymmetric switch architecture for use in a network switch node	Cisco Technology, Inc.	008800/0585	David A. HUGHES
0370.2023CIP	10019	US	09/010,891	1/22/1998	6,477,174	11/5/2002	Polling response selection using request monitoring in a network switch apparatus	Cisco Technology, Inc.	008999/0232	DOOLEY et al.

0370.2023CON	269136	US	10/245,932	9/17/2002	7,072,350	7/4/2006	Polling response selection using request monitoring in a network switch apparatus	Cisco Technology, Inc.	008999/0232	DOOLEY et al.
0370.2023i	9904-845	WO	PCT/US1996/14637	9/12/1996	N/A	4/3/1997	An asymmetric switch architecture for use in a network switch node	Cisco Technology, Inc.	008999/0232	David A. HUGHES
0370.2024C	155170	US	09/216,004	12/17/1998	7,233,600	6/19/2007	Method and apparatus for dynamic DSP resource management	Cisco Technology, Inc.	009682/0679	CHAU et al.
0370.2024i	155170-877	WO	PCT/US1999/29690	12/13/1999	N/A	6/22/2000	Method and apparatus for dynamic DSP resource management	Cisco Technology, Inc.	009682/0679	CHAU et al.
0370.2025C	155173	US	09/208,823	12/9/1998	6,636,484	10/21/2003	Automatic generation of OAM cells for connection continuity detection	Cisco Technology, Inc.	009642/0449	AGRAWAL et al.
0370.2026C	23467	US	09/216,647	12/18/1998	6,615,257	9/2/2003	A Secure multi-user cable modem configuration editor and viewer	Cisco Technology, Inc.	009849/0541	LEE et al.
0370.2027C	155583	US	09/405,787	9/27/1999	7,133,417	11/7/2006	Multipath voice switching method and apparatus	Cisco Technology, Inc.	011060/0614	KAO et al.
0370.2028C	155580	US	09/406,211	9/27/1999	6,580,696	6/17/2003	Multi-adaptation for a voice packet-based echo canceller	Cisco Technology, Inc.	011060/0614	CHEN et al.
0370.2032i	949850-20568	WO	PCT/US07/68105	5/3/2007	N/A	12/13/2007	Proactive Credential Distribution	Cisco Technology, Inc.	017903/0464	SALOWEY et al.
0370.2033C	950303	US	11/681,277	3/2/2007	8,713,669	4/29/2014	Multi-domain dynamic group virtual private networks	Cisco Technology, Inc.	018952/0413	GUICHARD et al.

0370.2035C	951169	US	11/737,007	4/18/2007	8,705,348	4/22/2014	Use of metadata for time based anti-replay	Cisco Technology, Inc.	019178/0382	FLUHRER et al.
0370.2036C	951456	US	11/739,892	4/25/2007	8,549,584	10/1/2013	Physical security triggered dynamic network authentication and authorization	Cisco Technology, Inc.	019210/0148	SINGH et al.
0370.2036i	951456-24384	WO	PCT/US08/61084	4/22/2008	N/A	11/6/2008	Physical security triggered dynamic network authentication and authorization	Cisco Technology, Inc.	019210/0148	SINGH et al.
0370.2037C	955016	US	12/115,677	5/6/2008	8,381,268	2/19/2013	Network authorization status notification	Cisco Technology, Inc.	021264/0050	WINGET et al.
0370.2037P	955022	US	60/917,451	5/11/2007	N/A	N/A	Network Authorization Status	Cisco Technology, Inc.	021264/0050	WINGET et al.
0370.2038C	953703	US	11/860,358	9/24/2007	8,214,466	7/3/2012	Virtualization of scalable role-based command line interface views	Cisco Technology, Inc.	019869/0319	KHAN et al.
0370.2039C	954411	US	11/968,488	1/2/2008	8,806,629	8/12/2014	AUTOMATIC GENERATION OF POLICY-DRIVEN ANTI-MALWARE SIGNATURES AND MITIGATION OF DOS (DENIAL-OF-SERVICE) ATTACKS	Cisco Technology, Inc.	020307/0527	CHEREPOV et al.
0370.2040P	956201	US	60/976,217	9/28/2007	N/A	N/A	IDENTITY ASSOCIATION WITHIN A COMMUNICATION SYSTEM	Cisco Technology, Inc.	020528/0137	Scott Grier WESTLAKE
0370.2041C	955749	US	12/112,717	4/30/2008	8,095,595	1/10/2012	Summarization of immersive collaboration environment	Cisco Technology, Inc.	020880/0979	BOBBITT et al.

0370.2043C	955474	US	12/127,397	5/27/2008	8,892,149	11/18/2014	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION	Cisco Technology, Inc.	021003/0843	SHAFFER et al.
0370.2044C	955797	US	12/112,456	4/30/2008	8,504,488	8/6/2013	Network data mining to determine user interest	Cisco Technology, Inc.	020879/0741	DUTTA et al.
0370.2133C	958502	US	12339732	19-Dec-08	8,281,049	2-Oct-12	Host-daughtercard configuration with double data rate bus	Cisco Technology, Inc.	022009/0598	James Everett GRISHAW
0370.2145C	954322	US	11/876,498	22-Oct-07	8,503,989	6-Aug-13	Dynamic contact list	Cisco Technology, Inc.	019996/0231	KASTURI et al.
0370.2147C	978234	US	13481184	25-May-12	8,584,942	19-Nov-13	Systems and methods for network inventory management utilizing mobile technology	Cisco Technology, Inc.	028281/0111	RAYES et al.
0370.2148C	979862	US	13483950	30-May-12	8,649,690	11-Feb-14	Optical communication reception system	Cisco Technology, Inc.	028327/0933 and 029839/0834	GEHRKE et al.
0370.2150C	960991	US	13083147	8-Apr-11	8,776,202	8-Jul-14	Method and apparatus to scale authenticated firewall traversal using trusted routing point	Cisco Technology, Inc.	026113/0773	RAVINDRANATH et al.
0370.2151C	982380	US	13/828,455	14-Mar-13	8,873,899	28-Oct-14	Modal rotation in optical waveguides	Cisco Technology, Inc.	030193/0385	ANDERSON et al.
0370.2152C	613021	US	11/178,647	11-Jul-05	8,838,829	16-Sep-14	Pseudowire (PW) switching type-length-value (TLV)	Cisco Technology, Inc.	016771/0862	MARTINI et al.
0370.2154C	973936	US	13291847	8-Nov-11	8,891,552	18-Nov-14	Managed access to mobile endpoints	Cisco Technology, Inc.	027208/0570	JOSHI et al.

0370.2156C	420351	US	13398478	16-Feb-12	8,938,148	20-Jan-15	Variable optical attenuator	Cisco Technology, Inc.	027724/0726	Brice D. ACHKIR
0370.2164C	974062	US	13301352	21-Nov-11	8,585,228	19-Nov-13	Viewing angle system for backlighted displays	Cisco Technology, Inc.	027257/0258	HAYDEN et al.
0370.2165C	977966	US	13434388	29-Mar-12	8,799,230	5-Aug-14	Method and system for centralized issue tracking	Cisco Technology, Inc.	027960/0660	PIGNATARO et al.
0370.2166C	4851	US	09/137,158	20-Aug-98	6,121,693	19-Sep-00	Distributed Power System	Cisco Technology, Inc.	009408/0577	Agnes G. ROCK
0370.2167C	33101	US	09/267,745	15-Mar-99	6,539,026	25-Mar-03	Apparatus and method for delay management in a data communications network	Cisco Technology, Inc.	009831/0927	John G. WACLAWSKY pH.D.
0370.2168C	33241	US	09/305,947	6-May-99	6,453,430	17-Sep-02	Apparatus and Methods For Controlling Restart Conditions of a Faulted Process	Cisco Technology, Inc.	009955/0093	SINGH et al.
0370.2169C	36741	US	09/429,228	28-Oct-99	6,741,688	25-May-04	Method and apparatus for handling telephone calls	Cisco Technology, Inc.	010359/0296	Hunyue YAU
0370.2170C	37661	US	09/317,381	24-May-99	6,876,668	5-Apr-05	Apparatus and methods for dynamic bandwidth allocation	Cisco Technology, Inc.	010002/0945	CHAWLA et al.
0370.2171C	37667	US	09/358,084	21-Jul-99	6,771,661	3-Aug-04	Apparatus and methods for providing event-based data communications device configuration	Cisco Technology, Inc.	010130/0225	CHAWLA et al.
0370.2171CON	473203	US	10/889,390	12-Jul-04	7,564,872	21-Jul-09	Apparatus and methods for providing event-based data communications device configuration	Cisco Technology, Inc.	010130/0225	CHAWLA et al.

0370.2172C	38381	US	09/515,198	29-Feb-00	6,757,897	29-Jun-04	Apparatus and methods for scheduling and performing tasks	Cisco Technology, Inc.	010603/0785	SHI et al.
0370.2173C	42581	US	09/406,249	27-Sep-99	6,633,549	14-Oct-03	Auto-detection of ISDN BRI services	Cisco Technology, Inc.	010317/0475	Rohit Anand FEDANE
0370.2173CON	349079	US	10/684,161	10-Oct-03	6,990,125	24-Jan-06	Auto-detection of ISDN BRI services	Cisco Technology, Inc.	010317/0475	Rohit Anand FEDANE
0370.2174C	42741	US	09/430,653	29-Oct-99	6,628,649	30-Sep-03	Apparatus and methods providing redundant routing in a switched network device	Cisco Technology, Inc.	010768/0758	RAJ et al.
0370.2175C	55361	US	09/481,776	12-Jan-00	6,754,232	22-Jun-04	Dynamic codec speed selection and bandwidth pre-allocation in a voice packet network method and apparatus	Cisco Technology, Inc.	010513/0742	Michael E. TASKER
0370.2176C	57461	US	09/536,648	27-Mar-00	6,792,474	14-Sep-04	Apparatus and methods for allocating addresses in a network	CISCO TECHNOLOGY, INC.	010651/0786	HOPPRICH et al.
0370.2176CON	530650	US	10/921,663	19-Aug-04	7,792,993	7-Sep-10	Apparatus and methods for allocating addresses in a network	Cisco Technology, Inc.	015716/0046	HOPPRICH et al.
0370.2177C	59541	US	09/921,869	2-Aug-01	7,032,129	18-Apr-06	Fail-over support for legacy voice mail systems in New World IP PBXs	Cisco Technology, Inc.	012055/0639	BORRESEN et al.
0370.2177CON	949914	US	11/367,264	3-Mar-06	7,380,164	27-May-08	Fail-over support for legacy voice mail systems in New World IP PBXs	Cisco Technology, Inc.	012055/0639	BORRESEN et al.

0370.2178C	60861	US	09/539,733	30-Mar-00	6,765,926	20-Jul-04	Bit rearranging unit for network data, method for rearranging bits, and software for enabling the same	Cisco Technology, Inc.	010720/0910	PRICE et al.
0370.2179C	69301	US	10/071,811	7-Feb-02	7,577,726	18-Aug-09	Method for updating a hardware configuration of a networked communications device	Cisco Technology, Inc.	012584/0040	CONARD et al.
0370.2180C	80207	US	09/629,032	31-Jul-00	6,873,604	29-Mar-05	Method and apparatus for transitioning comfort noise in an IP-based telephony system	Cisco Technology, Inc.	011237/0642	SURAZSKI et al.
0370.2181C	83221	US	09/944,252	30-Aug-01	7,154,852	26-Dec-06	Devices, softwares and methods for dynamic bandwidth allocation for ATM connections	Cisco Technology, Inc.	012173/0240	KALIMUTHU et al.
0370.2182C	83981	US	09/737,173	13-Dec-00	6,714,644	30-Mar-04	Ringing scheduling for FXS ports on platforms with limited power supply	Cisco Technology, Inc.	011714/0679	COHN et al.
0370.2183C	90121	US	09/734,783	11-Dec-00	7,027,389	11-Apr-06	Fast failure detection using RTT time considerations on a non-retransmit medium	Cisco Technology, Inc.	011553/0879	Randall R. STEWART
0370.2184C	90621	US	09/812,134	19-Mar-01	7,433,311	7-Oct-08	Methods and apparatus for allocating resources in a communications system	Cisco Technology, Inc.	011629/0245	KALYANASUNDARAM et al.

0370.2185C	92781	US	09/811,969	19-Mar-01	7,116,682	3-Oct-06	Methods and apparatus for dynamic bandwidth adjustment	Cisco Technology, Inc.	011625/0827	WACLAWSKY et al.
0370.2186C	93221	US	09/751,348	27-Dec-00	6,728,876	27-Apr-04	Method and apparatus to use non-volatile read/write memory for bootstrap code and processes by relocating write instructions	Cisco Technology, Inc.	011676/0849	Jainendra KUMAR
0370.2186CON	441607	US	10/806,721	22-Mar-04	7,228,411	5-Jun-07	Method and apparatus to use-volatile read/write memory for bootstrap code and processes by relocating write instructions	Cisco Technology, Inc.	015965/0852	Jainendra KUMAR
0370.2187C	93281	US	10/038,539	3-Jan-02	7,177,304	13-Feb-07	Devices, softwares and methods for prioritizing between voice data packets for discard decision purposes	Cisco Technology, Inc.	012450/0202	MO et al.
0370.2188C	93301	US	10/038,337	3-Jan-02	7,170,855	30-Jan-07	Devices, softwares and methods for selectively discarding indicated ones of voice data packets received in a jitter buffer	Cisco Technology, Inc.	012449/0904	MO et al.
0370.2189C	94181	US	09/922,175	1-Aug-01	7,945,650	17-May-11	Identifying modular chassis composition by using network physical topology information	Cisco Technology, Inc.	012050/0388	James KRACHT

0370.2189CIP	154419	US	10/131,538	23-Apr-02	7,203,750	10-Apr-07	Method and apparatus for controlling the dissemination of information via HTTP by using network physical topology information	Cisco Technology, Inc.	012836/0692	James KRACHT
0370.2189DIV	974404	US	13090072	19-Apr-11	8,842,576	23-Sep-14	Identifying modular chassis composition by using network physical topology information	Cisco Technology, Inc.	033287/0433	James KRACHT
0370.2190C	95321	US	09/912,852	24-Jul-01	6,963,909	8-Nov-05	Controlling the response domain of a bootP/DHCP server by using network physical topology information	Cisco Technology, Inc.	012277/0088	HUEY et al.
0370.2191C	95421	US	09/848,123	2-May-01	7,042,996	9-May-06	Method and apparatus for cas-based ring limiting of FXS ports	Cisco Technology, Inc.	011781/0118	Somnath MITRA
0370.2192C	99688	US	09/758,911	10-Jan-01	7,593,355	22-Sep-09	Method and apparatus for an enhanced VoIP call initiation interface	Cisco Technology, Inc.	012013/0920	SURAZSKI et al.
0370.2193C	122595	US	09/947,595	5-Sep-01	7,035,915	25-Apr-06	Method and apparatus for IP address assignment	Cisco Technology, Inc.	012158/0919	HUO et al.
0370.2194C	140068	US	09/974,963	9-Oct-01	7,020,080	28-Mar-06	Method and apparatus for prevention of flow starvation with weighted fair queuing	Cisco Technology, Inc.	012248/0210	MITRA et al.

0370.2195C	141408	US	10/040,699	28-Dec-01	7,310,344	18-Dec-07	Method and system for an instant messenger home automation system interface using a home router	Cisco Technology, Inc.	012460/0126	John Ah SUE
0370.2196C	144043	US	10/077,241	14-Feb-02	7,032,167	18-Apr-06	Method and apparatus for a document parser specification	Cisco Technology, Inc.	012609/0589	CLEASBY et al.
0370.2197C	144053	US	10/091,997	5-Mar-02	7,240,126	3-Jul-07	Method and system for parsing for use in a server and web browser	Cisco Technology, Inc.	012671/0067	CLEASBY et al.
0370.2198C	144088	US	10/032,194	20-Dec-01	7,149,186	12-Dec-06	Apparatus and method for rate adaptation control	Cisco Technology, Inc.	012419/0648	Geroge Michael HEY
0370.2199C	150308	US	10/256,525	26-Sep-02	7,327,752	5-Feb-08	Method and apparatus of universal cross connect	Cisco Technology, Inc.	013339/0235	MITRA et al.
0370.2200C	157635	US	09/751,822	28-Dec-00	7,305,616	4-Dec-07	Document builder for interactive dynamic documentation web site	Cisco Technology, Inc.	011413/0693	NELSON et al.
0370.2201C	157644	US	09/839,975	20-Apr-01	7,499,972	3-Mar-09	B2B service center communications using locate collaborate transact methodology	Cisco Technology, Inc.	011738/0926	BUONANNO et al.
0370.2202C	161778	US	10/209,611	29-Jul-02	6,703,875	9-Mar-04	Device for emulating phase-locked loop and method for same	Cisco Technology, Inc.	013480/0414	Tsu-Yau CHUANG
0370.2203C	176211	US	10/171,189	11-Jun-02	6,690,449	10-Feb-04	LCD power loss indication	Cisco Technology, Inc.	013002/0537	INGLIS et al.
0370.2204C	178932	US	10/231,783	28-Aug-02	7,426,182	16-Sep-08	Method of managing signal processing resources	Cisco Technology, Inc.	013267/0975	WANG et al.

0370.2205C	179751	US	10/235,114	4-Sep-02	7,200,678	3-Apr-07	Selecting network address offered by a plurality of servers based on server identification information	Cisco Technology, Inc.	013263/0556	BETTADAHALLI et al.
0370.2206C	227224	US	10/378,760	3-Mar-03	7,697,568	13-Apr-10	Method and system for automatic modem bandwidth detection in a router	Cisco Technology, Inc.	013844/0115	ZHANG et al.
0370.2207C	231198	US	10/898,105	22-Jul-04	7,756,542	13-Jul-10	Managing a radio environment without location information	Cisco Technology, Inc.	015619/0773	KAISER et al.
0370.2208C	260697	US	10/387,813	12-Mar-03	7,167,548	23-Jan-07	Method and apparatus for modifying gain settings in a connection interface	Cisco Technology, Inc.	013867/0530	Rohit Anand FEDANE
0370.2209C	268408	US	10/440,276	16-May-03	6,965,224	15-Nov-05	Method and apparatus for testing synchronization circuitry	Cisco Technology, Inc.	014095/0515	George Michael HEY
0370.2210C	276853	US	10/637,333	8-Aug-03	7,619,169	17-Nov-09	Method and apparatus for reducing electromagnetic radiated emissions from a chassis	Cisco Technology, Inc.	014386/0782	HO et al.
0370.2211C	277610	US	10/681,870	8-Oct-03	7,484,011	27-Jan-09	Apparatus and method for rate limiting and filtering of HTTP(S) server connections in embedded systems	Cisco Technology, Inc.	014594/0622	AGASAVEERAN et al.

0370.2212C	285474	US	10/654,309	2-Sep-03	7,574,217	11-Aug-09	Method for dynamic configuration of a mobile access point	Cisco Technology, Inc.	014477/0601	LEUNG et al.
0370.2213C	286650	US	10/652,058	29-Aug-03	7,870,604	11-Jan-11	Methods and apparatus to configure network nodes supporting virtual connections	Cisco Technology, Inc.	014459/0192	GUICHARD et al.
0370.2213DIV	972772	US	12966722	13-Dec-10	8,792,504	29-Jul-14	Methods and apparatus to configure network nodes supporting virtual connections	Cisco Technology, Inc.	014459/0192	GUICHARD et al.
0370.2214C	286657	US	10/649,755	26-Aug-03	7,373,660	13-May-08	Methods and apparatus to distribute policy information	Cisco Technology, Inc.	014447/0440	GUICHARD et al.
0370.2215C	309557	US	10/674,079	29-Sep-03	7,698,456	13-Apr-10	Methods and apparatus to support routing of information	Cisco Technology, Inc.	016591/0955	GUICHARD et al.
0370.2216C	311528	US	10/680,601	6-Oct-03	7,369,559	6-May-08	Adaptive call admission control for calls handled over a compressed clear channel	Cisco Technology, Inc.	014598/0180	GARAKANI et al.
0370.2217C	328074	US	10/912,595	4-Aug-04	7,385,945	10-Jun-08	Eliminating multicast/broadcast collisions in a wireless local area network	Cisco Technology, Inc.	015666/0717	OLSON et al.
0370.2218C	382649	US	10/911,434	3-Aug-04	7,242,226	10-Jul-07	Method and apparatus for avoiding false switching in an electronic device	Cisco Technology, Inc.	015664/0069	Theodore Hogeland CONRAD, III
0370.2219C	388864	US	10/761,109	19-Jan-04	7,050,801	23-May-06	Method and system for hitless wireless roaming in a mobile environment	Cisco Technology, Inc.	015270/0762	SEGAL et al.

0370.2220C	417787	US	10/888,691	9-Jul-04	7,680,074	16-Mar-10	Method and apparatus for optimizing cell operation toward better speech quality in wireless packet-switching networks	Cisco Technology, Inc.	015569/0059	XU et al.
0370.2221C	432226	US	10/931737	1-Sep-04	7,876,714	25-Jan-11	Techniques for managing conference schedules using groups	Cisco Technology, Inc.	015768/0618	ETHIER et al.
0370.2221CP2	475542	US	10/984402	9-Nov-04	7,881,233	1-Feb-11	Techniques for planning a conference using location data	Cisco Technology, Inc.	015981/0047	BIESELIN et al.
0370.2221CP3	475545	US	10/983,283	5-Nov-04	7,881,232	1-Feb-11	Techniques for managing expenses for a conference scheduled using availability data	Cisco Technology, Inc.	015981/0064	BIESELIN et al.
0370.2221DIV	973052	US	12972158	17-Dec-10	8,594,291	26-Nov-13	Techniques for planning a conference using location data	Cisco Technology, Inc.	015981/0047	BIESELIN et al.
0370.2222C	445736	US	10/988,754	15-Nov-04	7,848,332	7-Dec-10	Method and apparatus for classifying a network protocol and aligning a network protocol header relative to cache line boundary	Cisco Technology, Inc.	015999/0417	LEE et al.
0370.2222CON	972848	US	12947535	16-Nov-10	8,599,855	3-Dec-13	Network protocol header alignment	Cisco Technology, Inc.	015999/0417	LEE et al.
0370.2223C	456091	US	10/982,620	3-Nov-04	7,656,861	2-Feb-10	Method and apparatus for interleaving text and media in a real-time transport session	Cisco Technology, Inc.	015720/0300	JONES et al.

0370.2224C	458644	US	11/178,141	8-Jul-05	7,529,256	5-May-09	Communication device client update system and method	Cisco Technology, Inc.	016773/0980	Arnavkumar M. PATHAN
0370.2225C	467717	US	11/001,368	30-Nov-04	8,116,442	14-Feb-12	Method and apparatus for audio conference bridge initiated remote device muting	Cisco Technology, Inc.	016051/0785	Phillip A. REMAKER
0370.2226C	472809	US	11/009,257	9-Dec-04	7,382,797	3-Jun-08	Mechanism to select the physical media type connector in network devices	Cisco Technology, Inc.	016156/0654	NOONE et al.
0370.2227C	474267	US	11/018368	21-Dec-04	7,464,243	9-Dec-08	Method and apparatus for arbitrarily initializing a portion of memory	Cisco Technology, Inc.	016122/0503	HARIDAS et al.
0370.2229C	478546	US	10/961,773	7-Oct-04	7,113,392	26-Sep-06	Integrated mechanical standoff and wall-mount apparatus	Cisco Technology, Inc.	015897/0200	LU et al.
0370.2230C	480567	US	11/102,085	7-Apr-05	7,653,048	26-Jan-10	Method and apparatus for providing optimal VoIP call routing in VRF environment	Cisco Technology, Inc.	021224/0108	CAO et al.
0370.2231C	486181	US	11/073,317	3-Mar-05	7,370,362	6-May-08	Method and apparatus for locating rogue access point switch ports in a wireless network	Cisco Technology, Inc.	016476/0770	OLSON et al.
0370.2232C	487667	US	11/056,545	11-Feb-05	8,037,204	11-Oct-11	Method and system for IP train inauguration	Cisco Technology, Inc.	016284/0372	BRETON et al.

0370.2233C	495606	US	11/142,031	31-May-05	7,620,708	17-Nov-09	Automatic discovery of controlling policy enforcement point in a policy push model	Cisco Technology, Inc.	016649/0686	Flemming S. ANDREASEN
0370.2234C	499428	US	11/112,657	21-Apr-05	7,260,118	21-Aug-07	Methods and systems for generating an accurate adaptive clock	Cisco Technology, Inc.	016503/0165	Joji Thomas MEKKATTUPARAMBAN
0370.2235C	502317	US	11/255828	22-Oct-05	8,286,183	9-Oct-12	Techniques for task management using presence	Cisco Technology, Inc.	017123/0878	BAIRD et al.
0370.2236C	504178	US	11/189,357	26-Jul-05	7,599,303	6-Oct-09	System and methods for sending trace messages	Cisco Technology, Inc.	016818/0987	NADEAU et al.
0370.2237C	510082	US	11/001,149	1-Dec-04	7,583,593	1-Sep-09	System and methods for detecting network failure	Cisco Technology, Inc.	016049/0914	GUICHARD et al.
0370.2238C	526750	US	11/203,801	15-Aug-05	7,609,620	27-Oct-09	Method and apparatus using multiprotocol label switching (MPLS) label distribution protocol (LDP) to establish label switching paths (LSPS) for directed forwarding	Cisco Technology, Inc.	016895/0124	RAJ et al.
0370.2239C	537450	US	11/048,077	1-Feb-05	7,433,320	7-Oct-08	System and methods for network path detection	Cisco Technology, Inc.	016243/0312	PREVIDI et al.
0370.2240C	540893	US	11/159,719	23-Jun-05	7,505,402	17-Mar-09	Method and apparatus for providing faster convergence for redundant sites	Cisco Technology, Inc.	016723/0804	FILSFILS et al.
0370.2241C	545329	US	11/063,803	23-Feb-05	7,471,636	30-Dec-08	Methods and apparatus based on message transmission times	Cisco Technology, Inc.	016328/0389	VASSEUR et al.

0370.2242C	548365	US	11/072,082	4-Mar-05	7,990,888	2-Aug-11	System and methods for network reachability detection	Cisco Technology, Inc.	016358/0916 and 021827/0131	NADEAU et al.
0370.2243C	554983	US	11/138,052	26-May-05	7,936,668	3-May-11	Methods and apparatus for distributing label information	Cisco Technology, Inc.	016607/0551	GUICHARD et al.
0370.2244C	563350	US	11/152,523	14-Jun-05	7,408,941	5-Aug-08	Method for auto-routing of multi-hop pseudowires	Cisco Technology, Inc.	016695/0227	MARTINI et al.
0370.2245C	563996	US	11/214,521	30-Aug-05	7,668,178	23-Feb-10	Methods and apparatus for implementing VPN services	Cisco Technology, Inc.	016941/0594	MARTINI et al.
0370.2246C	565980	US	11/169,417	29-Jun-05	7,602,778	13-Oct-09	System and methods for compressing message headers	Cisco Technology, Inc.	016747/0931	GUICHARD et al.
0370.2247C	566005	US	11/187,341	21-Jul-05	7,720,462	18-May-10	Network communications security enhancing	Cisco Technology, Inc.	016806/0545	Steve CHU
0370.2248C	570858	US	11/250,010	13-Oct-05	7,869,436	11-Jan-11	Methods and apparatus for connecting to virtual networks using non supplicant authentication	Cisco Technology, Inc.	017106/0766	ADLER et al.
0370.2249C	582918	US	11/216,963	31-Aug-05	7,733,876	8-Jun-10	Inter-autonomous-system virtual private network with autodiscovery and connection signaling	Cisco Technology, Inc.	016951/0342	DAVIE et al.
0370.2250C	587471	US	11/153,649	15-Jun-05	7,773,611	10-Aug-10	Method and apparatus for packet loss detection	Cisco Technology, Inc.	016695/0849	BOOTH et al.
0370.2251C	596688	US	11/287,093	22-Nov-05	7,620,870	17-Nov-09	Data compression method and system	Cisco Technology, Inc.	017292/0854	SRINIVASAN et al.

0370.2252C	603037	US	11/186580	21-Jul-05	7,724,887	25-May-10	User interface for call history	Cisco Technology, Inc.	016798/0324	JENNINGS et al.
0370.2254C	613045	US	11/580,167	11-Oct-06	8,081,563	20-Dec-11	Protecting multi-segment pseudowires	Cisco Technology, Inc.	018416/0101	GUICHARD et al.
0370.2255C	613427	US	11/430,208	8-May-06	7,839,847	23-Nov-10	Methods and apparatus providing VPN traffic matrix construction	Cisco Technology, Inc.	017884/0116	NADEAU et al.
0370.2256C	617591	US	11/226,011	14-Sep-05	7,688,829	30-Mar-10	System and methods for network segmentation	Cisco Technology, Inc.	017000/0786	GUICHARD et al.
0370.2257C	618820	US	11/281,017	16-Nov-05	7,885,392	8-Feb-11	Method and apparatus for enhanced voice massage addressing and playback via a phone interface	Cisco Technology, Inc.	017254/0552	Timothy Joseph FUJITA-YUHAS
0370.2258C	631448	US	11/361,299	24-Feb-06	8,160,055	17-Apr-12	System and methods for identifying network path performance	Cisco Technology, Inc.	017627/0001	NADEAU et al.
0370.2259C	633588	US	11/287911	28-Nov-05	8,045,473	25-Oct-11	Tailored relief for congestion on application servers for real time communications	Cisco Technology, Inc.	017289/0202	Michael Philip HAMMER
0370.2260C	637465	US	11/363,840	27-Feb-06	7,675,860	9-Mar-10	Method and apparatus for determining a preferred backup tunnel to protect point-to-multipoint label switch paths	Cisco Technology, Inc.	017634/0276	VASSEUR et al.
0370.2261C	661056	US	11/328,436	9-Jan-06	7,912,934	22-Mar-11	Methods and apparatus for scheduling network probes	Cisco Technology, Inc.	017691/0450	MELTON et al.
0370.2262C	664745	US	11/350,991	9-Feb-06	7,613,826	3-Nov-09	Methods and apparatus for providing multiple policies for a virtual private network	Cisco Technology, Inc.	017557/0807	GUICHARD et al.

0370.2263C	687367	US	11/524,723	20-Sep-06	7,933,257	26-Apr-11	Using QoS tunnels for TCP latency optimization	Cisco Technology, Inc.	019672/0896	Carl David SUTTON
0370.2264C	727669	US	11/444,059	31-May-06	7,965,656	21-Jun-11	Building multipoint pseudo wires using a multipoint label distribution protocol (MLDP)	Cisco Technology, Inc.	017960/0619	WIJNANDS et al.
0370.2265C	738892	US	11/347,182	3-Feb-06	7,742,477	22-Jun-10	Interconnectivity between autonomous systems	Cisco Technology, Inc.	017548/0018	GUICHARD et al.
0370.2267C	741027	US	11/430116	8-May-06	7,461,180	2-Dec-08	Method and apparatus for synchronizing use of buffer descriptor entries for shared data packets in memory	Cisco Technology, Inc.	022052/0695	LEE et al.
0370.2268C	778716	US	11/393,152	29-Mar-06	7,769,044	3-Aug-10	Voice over internet protocol favoring aggregating technology in a WLAN	Cisco Technology, Inc.	017701/0717	Xiaode XU
0370.2269C	780852	US	11/353,508	13-Feb-06	7,924,890	12-Apr-11	Apparatus and method for increasing reliability of data sensitive to packet loss	Cisco Technology, Inc.	018098/0731	Praveen KONDA
0370.2270C	792437	US	11/497,952	1-Aug-06	7,899,049	1-Mar-11	Methods and apparatus for minimizing duplicate traffic during point to multipoint tree switching in a network	Cisco Technology, Inc.	018133/0279	RAJ et al.

0370.2271C	803222	US	11/388,096	22-Mar-06	7,788,543	31-Aug-10	Methods and systems for generating and storing computer program execution trace data	Cisco Technology, Inc.	017726/0624	Jyhren Jerry CHEN
0370.2272C	842145	US	11/557,033	6-Nov-06	7,774,622	10-Aug-10	CRPTO envelope around a CPU with DRAM for image protection	Cisco Technology, Inc.	018489/0510	Somnath MITRA
0370.2273C	846044	US	11/786,506	12-Apr-07	8,009,558	30-Aug-11	Pseudowire load balancing	Cisco Technology, Inc.	019213/0348	WARD et al.
0370.2274C	852160	US	11/716,055	9-Mar-07	7,969,898	28-Jun-11	Technique for breaking loops in a communications network	Cisco Technology, Inc.	019085/0908	RAJ et al.
0370.2275C	903339	US	11/506169	17-Aug-06	8,391,255	5-Mar-13	Content throughput on wireless mesh networks	Cisco Technology, Inc.	018216/0309	RIBIERE et al.
0370.2276C	903864	US	11/456,022	6-Jul-06	8,218,528	10-Jul-12	Gateway providing third party call control	Cisco Technology, Inc.	017887/0760	Yuan CAI
0370.2277C	906305	US	11/500822	7-Aug-06	8,379,661	19-Feb-13	Methods and systems for a customer premise equipment to reverse the upstream speed and downstream speed of a network connection	Cisco Technology, Inc.	018174/0119	HSU et al.
0370.2278C	949647	US	11/552,909	25-Oct-06	7,792,097	7-Sep-10	Static, dynamic and intelligent VRF routing for services traffic	Cisco Technology, Inc.	018437/0970	WOOD et al.
0370.2278CON	971484	US	12/844,761	27-Jul-10	8,457,117	4-Jun-13	Static, dynamic and intelligent VRF routing for services traffic	Cisco Technology, Inc.	018437/0970	WOOD et al.
0370.2279C	949707	US	11/444,652	31-May-06	7,796,532	14-Sep-10	Media segment monitoring	Cisco Technology, Inc.	017922/0746	CONNOR et al.

0370.2280C	949921	US	11/682229	5-Mar-07	7,885,342	8-Feb-11	Managing bit error rates on point-to-point wireless links in a network	Cisco Technology, Inc.	018960/0845	BRAINOS et al.
0370.2281C	949987	US	12/101,918	11-Apr-08	8,452,591	28-May-13	Comfort noise information handling for audio transcoding applications	Cisco Technology, Inc.	020996/0758	WILDFEUER et al.
0370.2282C	950034	US	11/725,157	15-Mar-07	8,077,721	13-Dec-11	Methods and apparatus providing two stage tunneling	Cisco Technology, Inc.	019232/0259 and 019442/0489	RASZUK et al.
0370.2283C	950074	US	11/614,569	21-Dec-06	7,760,647	20-Jul-10	Out of band flow control	Cisco Technology, Inc.	018669/0035	LI et al.
0370.2284C	950113	US	11/696,611	4-Apr-07	8,582,557	12-Nov-13	Fax relay tunneling	Cisco Technology, Inc.	019115/0355	Herbert Michael WILDFEUER
0370.2285C	950663	US	11/468,219	29-Aug-06	7,710,959	4-May-10	Private VLAN edge across multiple switch modules	Cisco Technology, Inc.	018286/0481	RAMASAMY et al.
0370.2286C	950727	US	11/642,473	20-Dec-06	8,116,227	14-Feb-12	Optimal automated exploration of hierarchical multiprotocol label switching label switch paths	Cisco Technology, Inc.	018730/0046	PRAIRIE et al.
0370.2286CON	977580	US	13358290	25-Jan-12	8,717,936	6-May-14	Optimal automated exploration of hierarchical multiprotocol label switching label switch paths	Cisco Technology, Inc.	018730/0046	PRAIRIE et al.
0370.2287C	950751	US	11/670,381	1-Feb-07	7,937,531	3-May-11	Regularly occurring write back scheme for cache soft error reduction	Cisco Technology, Inc.	018841/0586	Somnath MITRA
0370.2288C	950813	US	11/765,094	19-Jun-07	8,862,095	14-Oct-14	Managing mobile nodes in a lawful intercept architecture	Cisco Technology, Inc.	019450/0518	POPOVICIU et al.

0370.2289C	950930	US	11/844,119	23-Aug-07	7,885,294	8-Feb-11	Signaling compression information using routing protocols	Cisco Technology, Inc.	019811/0550	PATEL et al.
0370.2290C	951056	US	12/243,491	1-Oct-08	7,860,100	28-Dec-10	Service Path Selection in a Service Network	Cisco Technology, Inc.	021628/0115	KHALID et al.
0370.2291C	951273	US	11/762,218	13-Jun-07	8,254,271	28-Aug-12	Point-to-multipoint connectivity verification	Cisco Technology, Inc.	019421/0832	NADEAU et al.
0370.2292C	951338	US	11/638,063	12-Dec-06	7,782,790	24-Aug-10	Extensions to the path verification protocol to support link bundling constructs	Cisco Technology, Inc.	018707/0977	NADEAU et al.
0370.2293C	951439	US	12/024,031	31-Jan-08	7,808,998	5-Oct-10	Disconnected transport protocol connectivity	Cisco Technology, Inc.	020452/0807	STEWART et al.
0370.2294C	951732	US	11/697,571	6-Apr-07	8,374,164	12-Feb-13	Detection of specific BFD path failures	Cisco Technology, Inc.	019138/0330	NADEAU et al.
0370.2295C	952248	US	11/713,504	2-Mar-07	7,869,351	11-Jan-11	Communication techniques and generic layer 3 automatic switching protection	Cisco Technology, Inc.	019066/0485 and 019245/0992	WARD et al.
0370.2296C	952349	US	11/673,495	9-Feb-07	8,199,680	12-Jun-12	Correlating calls after a referral	Cisco Technology, Inc.	018877/0583	CAI et al.
0370.2296CON	980254	US	13/476,428	21-May-12	8,787,213	22-Jul-14	Correlating calls after a referral	Cisco Technology, Inc.	028241/0736	CAI et al.
0370.2297C	952647	US	11/863218	27-Sep-07	7,756,038	13-Jul-10	Service advertisement framework (SAF) in a communications network	Cisco Technology, Inc.	019893/0046	SAVAGE et al.
0370.2298C	953682	US	11/780,928	20-Jul-07	8,199,746	12-Jun-12	Using PSTN reachability to verify VoIP call routing information	Cisco Technology, Inc.	019585/0563	ROSENBERG et al.

0370.2298CN1	980474	US	13493486	11-Jun-12	8,675,642	18-Mar-14	Using PSTN reachability to verify VoIP call routing information	Cisco Technology, Inc.	028369/0350	ROSENBERG et al.
0370.2298CP1	960136	US	12495615	30-Jun-09	8,228,902	24-Jul-12	Separation of validation services in VoIP address discovery system	Cisco Technology, Inc.	023322/0358	MEHMOOD et al.
0370.2298CP2	960142	US	12608545	29-Oct-09	8,223,755	17-Jul-12	Node reputation based on knowledge of PSTN calls	Cisco Technology, Inc.	023468/0850	JENNINGS et al.
0370.2298CP3	960147	US	12608484	29-Oct-09	8,228,904	24-Jul-12	Using PSTN reachability in anonymous verification of VoIP call routing information	Cisco Technology, Inc.	023468/0897	ROSENBERG et al.
0370.2298CP4	960140	US	12495595	30-Jun-09	8,274,968	25-Sep-12	Restriction of communication in VoIP address discovery system	Cisco Technology, Inc.	023322/0335	ROSENBERG et al.
0370.2298CP5	960745	US	12495639	30-Jun-09	8,228,903	24-Jul-12	Integration of VoIP address discovery with PBXs	Cisco Technology, Inc.	023322/0341	ROSENBERG et al.
0370.2299C	953706	US	11972277	10-Jan-08	8,144,600	27-Mar-12	Optimization for wireless access point management	Cisco Technology, Inc.	020351/0924	THOMSON et al.
0370.2300C	953987	US	12333858	12-Dec-08	8,311,036	13-Nov-12	Device based emergency services for cross cluster extension mobility	Cisco Technology, Inc.	021973/0116	KELLER et al.
0370.2301C	954666	US	12176125	18-Jul-08	8,094,667	10-Jan-12	RTP video tunneling through H.221	Cisco Technology, Inc.	021292/0159	Nicholas J. CUTAIA
0370.2302C	954784	US	11/934,576	2-Nov-07	7,957,295	7-Jun-11	Ethernet performance monitoring	Cisco Technology, Inc.	020067/0769	VARMA et al.
0370.2302CN2	984702	US	13826992	14-Mar-13	8,780,731	15-Jul-14	Ethernet performance monitoring	Cisco Technology, Inc.	020067/0769	VARMA et al.

0370.2302CON	974656	US	13116607	26-May-11	8,400,929	19-Mar-13	Ethernet performance monitoring	Cisco Technology, Inc.	029616/0294	VARMA et al.
0370.2303C	954942	US	11/780,941	20-Jul-07	8,204,047	19-Jun-12	Using PSTN reachability to verify caller ID information in received VoIP calls	Cisco Technology, Inc.	019585/0592	ROSENBERG et al.
0370.2304C	954943	US	11/780,975	20-Jul-07	8,072,967	6-Dec-11	VoIP call routing information registry including hash access mechanism	Cisco Technology, Inc.	019585/0613	ROSENBERG et al.
0370.2305C	955043	US	12/015,140	16-Jan-08	8,589,974	19-Nov-13	Electronic advertising using distributed demographics	Cisco Technology, Inc.	020605/0971	MENDITTO et al.
0370.2306C	955221	US	11/957,983	17-Dec-07	8,284,696	9-Oct-12	Tracking customer edge traffic	Cisco Technology, Inc.	020268/0912	YE et al.
0370.2307C	955977	US	12204342	4-Sep-08	8,510,146	13-Aug-13	Contact center sizing and broadcasting based on probabilities	Cisco Technology, Inc.	021491/0377	JORDAN et al.
0370.2308C	956070	US	12840038	20-Jul-10	8,639,844	28-Jan-14	System for establishing a media stream	Cisco Technology, Inc.	024720/0763	KUMARASAMY et al.
0370.2309C	956369	US	12403146	12-Mar-09	8,180,991	15-May-12	Adaptive memory allocation	Cisco Technology, Inc.	022397/0664	RAVINDRANATH et al.
0370.2310C	956511	US	12178415	23-Jul-08	8,358,268	22-Jan-13	Multi-touch detection	Cisco Technology, Inc.	021280/0815	David EVANS
0370.2310CON	982202	US	13717342	17-Dec-12	8,754,866	17-Jun-14	Multi-touch detection	Cisco Technology, Inc.	021280/0815	David EVANS
0370.2311C	956846	US	12360699	27-Jan-09	8,737,597	27-May-14	Call progress analysis on the edge of a VoIP network	Cisco Technology, Inc.	022286/0425	SHAH et al.
0370.2312C	958185	US	12369436	11-Feb-09	8,400,943	19-Mar-13	IPv6 addressing over non-IPv6 systems	Cisco Technology, Inc.	022251/0366	DEC et al.
0370.2312CON	984699	US	13846214	18-Mar-13	8,897,171	25-Nov-14	IPv4 addressing over non-IPv4 systems	Cisco Technology, Inc.	022251/0366	DEC et al.

0370.2313C	958212	US	12196421	22-Aug-08	8,391,218	5-Mar-13	Multiple routable IP addresses for a cellular router	Cisco Technology, Inc.	021429/0181	JOSHI et al.
0370.2314C	958331	US	12099641	8-Apr-08	8,311,188	13-Nov-12	User interface with voice message summary	Cisco Technology, Inc.	020777/0493	ROHDE et al.
0370.2315C	958335	US	12099635	8-Apr-08	8,489,992	16-Jul-13	User interface with visual progression	Cisco Technology, Inc.	020778/0591	Ruben ROHDE
0370.2316C	958340	US	12/099,654	8-Apr-08	8,280,962	2-Oct-12	Service communication list	Cisco Technology, Inc.	020970/0507	MUNIZ et al.
0370.2317C	958342	US	12/099,552	8-Apr-08	8,091,033	3-Jan-12	System for displaying search results along a timeline	Cisco Technology, Inc.	020800/0001	SICHART et al.
0370.2318C	958494	US	12892522	28-Sep-10	8,868,250	21-Oct-14	Fan speed control	Cisco Technology, Inc.	025062/0108	JENSEN et al.
0370.2319C	958495	US	12269850	12-Nov-08	7,996,577	9-Aug-11	Automatically switching console connection	Cisco Technology, Inc.	021828/0143	SCHMIDT et al.
0370.2320C	958505	US	12/329,115	5-Dec-08	8,094,569	10-Jan-12	Failover and failback of communication between a router and a network switch	Cisco Technology, Inc.	022227/0037	GUNUKULA et al.
0370.2320CON	976970	US	13295870	14-Nov-11	8,605,575	10-Dec-13	Failover and failback of communication between a router and a network switch	Cisco Technology, Inc.	022227/0037	GUNUKULA et al.
0370.2321C	958521	US	12186339	5-Aug-08	7,764,692	27-Jul-10	Bypass of routing protocol filtering in a multi-subnet network	Cisco Technology, Inc.	021372/0052	BHATNAGAR et al.
0370.2322C	958544	US	12333790	12-Dec-08	8,070,522	6-Dec-11	Adaptor for a router blade	Cisco Technology, Inc.	021973/0027	SHTARGOT et al.
0370.2322CON	976783	US	13295903	14-Nov-11	8,475,214	2-Jul-13	Adaptor for a router blade	Cisco Technology, Inc.	030540/0348	SHTARGOT et al.
0370.2323C	958733	US	12464688	12-May-09	8,880,656	4-Nov-14	Customer edge device auto-configuration	Cisco Technology, Inc.	022814/0042	SALAM et al.

0370.2324C	958804	US	12/367,930	9-Feb-09	8,223,754	17-Jul-12	Auto-configured voice over internet protocol	Cisco Technology, Inc.	022246/0234	Jonathan David ROSENBERG
0370.2325C	958807	US	12/370,384	12-Feb-09	8,121,114	21-Feb-12	Prevention of voice over IP spam	Cisco Technology, Inc.	022421/0793	ROSENBERG et al.
0370.2325CON	977400	US	13348451	11-Jan-12	8,923,279	30-Dec-14	Prevention of voice over IP spam	Cisco Technology, Inc.	027522/0330	ROSENBERG et al.
0370.2326C	958833	US	12471138	22-May-09	8,340,123	25-Dec-12	Multi-channel transceiver module card	Cisco Technology, Inc.	022740/0776	BARBIERI et al.
0370.2327C	958925	US	12870480	27-Aug-10	8,532,994	10-Sep-13	Speech recognition using a personal vocabulary and language model	Cisco Technology, Inc.	024914/0239	MALEGAONKAR et al.
0370.2328C	959032	US	12464556	12-May-09	8,185,660	22-May-12	Inter-working between network address type (ANAT) endpoints and interactive connectivity establishment (ICE) endpoints	Cisco Technology, Inc.	022677/0380	PERUMAL et al.
0370.2328DIV	978212	US	13404944	24-Feb-12	8,312,169	13-Nov-12	Inter-working between network address type (ANAT) endpoints and interactive connectivity establishment (ICE) endpoints	Cisco Technology, Inc.	022677/0380	PERUMAL et al.
0370.2329C	959135	US	12340311	19-Dec-08	8,208,481	26-Jun-12	Determination of packet loss locations	Cisco Technology, Inc.	022038/0911	ELLIS et al.
0370.2330C	959393	US	12367981	9-Feb-09	8,311,292	13-Nov-12	Context aware, multiple target image recognition	Cisco Technology, Inc.	022246/0222	TIAN et al.
0370.2331C	959602	US	12437936	8-May-09	8,242,969	14-Aug-12	Connection for antennas operating above a ground plane	Cisco Technology, Inc.	022660/0028	LUTMAN et al.
0370.2331DIV	981145	US	13564178	1-Aug-12	8,519,893	27-Aug-13	Connection for antennas operating above a ground plane	Cisco Technology, Inc.	030778/0524	LUTMAN et al.

0370.2332C	960076	US	12608503	29-Oct-09	8,422,643	16-Apr-13	Playback of media recordings	Cisco Technology, Inc.	023520/0355	RATZLAFF et al.
0370.2333C	960113	US	12437962	8-May-09	8,108,020	31-Jan-12	Identification of an antenna	Cisco Technology, Inc.	022660/0067	ANDERSON et al.
0370.2410C	960115	US	12534448	3-Aug-09	8,769,032	1-Jul-14	Method and system for suggesting an optimal communication mode	Cisco Technology, Inc.	023049/0046	GINEVAN et al.
0370.2334C	960163	US	12608597	29-Oct-09	8,311,218	13-Nov-12	Rounding for security	Cisco Technology, Inc.	023468/0937	MEHMOOD et al.
0370.2335C	960171	US	12614671	9-Nov-09	8,301,880	30-Oct-12	Certificate enrollment with purchase to limit sybil attacks in peer-to-peer network	Cisco Technology, Inc.	023862/0851	JENNINGS et al.
0370.2336D	960313	US	29333555	11-Mar-09	D685,913	9-Jul-13	Patient Station	Cisco Technology, Inc.	022382/0989	AUGUSTINOS et al.
0370.2337C	960492	US	12353803	14-Jan-09	8,928,533	6-Jan-15	Mount for a network device	Cisco Technology, Inc.	022115/0731	Thomas P. SPIVEY
0370.2338C	960498	US	12353789	14-Jan-09	7,903,412	8-Mar-11	Mounting socket that dissipates heat from a network device	Cisco Technology, Inc.	022115/0743	Thomas P. SPIVEY
0370.2339C	960500	US	12353815	14-Jan-09	8,357,008	22-Jan-13	Security system for a network device	Cisco Technology, Inc.	022115/0749	Thomas P. SPIVEY
0370.2340C	960542	US	12648917	29-Dec-09	8,270,314	18-Sep-12	Synthetic frame loss ratio	Cisco Technology, Inc.	023872/0790	FINN et al.
0370.2341D	960551	US	29/330,832	14-Jan-09	D596,570	21-Jul-09	Network Socket	Cisco Technology, Inc.	022133/0546	Thomas P. SPIVEY
0370.2342C	960552	US	12353822	14-Jan-09	8,391,924	5-Mar-13	Add-on device for a network device	Cisco Technology, Inc.	022115/0752	Thomas P. SPIVEY
0370.2343D	960631	US	29330833	14-Jan-09	D610,101	16-Feb-10	Access Point Circuit Receptacle	Cisco Technology, Inc.	022133/0603	Thomas P. SPIVEY
0370.2344C	960735	US	12474524	29-May-09	8,305,286	6-Nov-12	Mounting an antenna system to a solid surface	Cisco Technology, Inc.	022752/0510	Timothy A. FRANK
0370.2344DIV	981858	US	13632650	1-Oct-12	8,446,335	21-May-13	Mounting an Antenna System to a Solid Surface	Cisco Technology, Inc.	029897/0742	Timothy A. FRANK

0370.2345C	960846	US	12544057	19-Aug-09	8,626,133	7-Jan-14	Matching a location of a contact with a task location	Cisco Technology, Inc.	023122/0982	KUHLKE et al.
0370.2346DIV	960934	US	12404868	16-Mar-09	8,428,244	23-Apr-13	Cross-call agent extension mobility with call admission control and emergency calling	Cisco Technology, Inc.	022469/0156	CHEN et al.
0370.2347C	961130	US	12826211	29-Jun-10	8,804,719	12-Aug-14	In-band multicast trace in IP and MPLS networks	Cisco Technology, Inc.	024638/0858	ALDRIN et al.
0370.2348C	961259	US	12581629	19-Oct-09	8,233,285	31-Jul-12	Linecard to chassis securing	Cisco Technology, Inc.	023394/0352	Christopher ZIEMAN
0370.2350C	961423	US	12580669	16-Oct-09	8,675,525	18-Mar-14	Media conference recording based on termination events	Cisco Technology, Inc.	023399/0241	LEE et al.
0370.2351C	961727	US	12826229	29-Jun-10	8,898,658	25-Nov-14	Dynamic web resource provisioning	Cisco Technology, Inc.	024638/0990	Michael Anthony CICCONE
0370.2353C	962080	US	12720463	9-Mar-10	8,713,053	29-Apr-14	Active tags	Cisco Technology, Inc.	024065/0266	JENNINGS et al.
0370.2354C	962162	US	10/421,280	23-Apr-03	7,590,724	15-Sep-09	Auto instrumentation system	Cisco Technology, Inc.	027195/0033	Robert D. Williams
0370.2355C	962169	US	12843680	26-Jul-10	8,736,044	27-May-14	Lid for an electrical hardware component	Cisco Technology, Inc.	024955/0446	AHMAD et al.
0370.2356C	962417	US	12715953	2-Mar-10	8,441,669	14-May-13	SG3-to-G3 fax spoof	Cisco Technology, Inc.	024024/0644	LUONG et al.
0370.2357C	962838	US	12/945,118	12-Nov-10	8,718,053	6-May-14	Packet transport for network device clusters	Cisco Technology, Inc.	025362/0715	RAGHURAMAN et al.
0370.2358C	962883	US	13178262	7-Jul-11	8,421,237	16-Apr-13	Stacked memory layers having multiple orientations and through-layer interconnects	Cisco Technology, Inc.	026563/0749	CHIA et al.
0370.2359C	963006	US	12836781	15-Jul-10	8,553,068	8-Oct-13	Switched multipoint conference using layered codecs	Cisco Technology, Inc.	024711/0769	TAYLOR et al.

0370.2360C	963019	US	12879795	10-Sep-10	8,405,203	26-Mar-13	Semiconductor package with integrated substrate thermal slug	Cisco Technology, Inc.	024981/0375	KEARNEY et al.
0370.2360DIV	985142	US	13850715	26-Mar-13	8,623,707	7-Jan-14	Method of fabricating a semiconductor package with integrated substrate thermal slug	Cisco Technology, Inc.	024981/0375	KEARNEY et al.
0370.2361C	969388	US	12965176	10-Dec-10	8,582,741	12-Nov-13	Unification of rosters in a communication system	Cisco Technology, Inc.	025472/0741	PEARCE et al.
0370.2362C	969395	US	12720335	9-Mar-10	8,539,083	17-Sep-13	Intelligent routing of coordinated audio, video, web services and measurement data streams	Cisco Technology, Inc.	024131/0507	AUGUSTINOS et al.
0370.2363C	969425	US	12958387	1-Dec-10	8,390,998	5-Mar-13	Configurable fan unit	Cisco Technology, Inc.	025690/0838	KLIEWER et al.
0370.2364C	969637	US	12828982	1-Jul-10	8,558,868	15-Oct-13	Conference participant visualization	Cisco Technology, Inc.	024638/0928	Steven Charles PRENTICE
0370.2365C	969662	US	12906783	18-Oct-10	8,526,185	3-Sep-13	Collar for electrically grounding a heat sink for a computer component	Cisco Technology, Inc.	025165/0097	HEIDEPRIEM et al.
0370.2366C	969668	US	13090939	20-Apr-11	8,789,133	22-Jul-14	Location based content filtering and dynamic policy	Cisco Technology, Inc.	026168/0262	KUHLKE et al.
0370.2367D	969717	US	29366132	20-Jul-10	D664,544	31-Jul-12	Router Interface Card	Cisco Technology, Inc.	024722/0909	YI et al.
0370.2368C	969728	US	13018903	1-Feb-11	8,761,377	24-Jun-14	Routing contact center interactions	Cisco Technology, Inc.	025746/0589	Tod FAMOUS
0370.2369D	969813	US	29365409	8-Jul-10	D654,066	14-Feb-12	ROUTER	Cisco Technology, Inc.	024685/0229	YI et al.

0370.2370C	969814	US	12787171	25-May-10	8,270,171	18-Sep-12	Cooling arrangement for a rack mounted processing device	Cisco Technology, Inc.	024478/0950	NARASIMHAN et al.
0370.2371C	970943	US	13280008	24-Oct-11	8,889,999	18-Nov-14	Multiple layer printed circuit board with unplated vias	Cisco Technology, Inc.	027145/0383	THURAIRAJARATNAM et al.
0370.2372C	971099	US	13070705	24-Mar-11	8,496,488	30-Jul-13	Power input terminal block housing and cover	Cisco Technology, Inc.	026033/0236	GRIMM et al.
0370.2372DIV	987038	US	13/952,127	26-Jul-13	8,632,359	21-Jan-14	Power input terminal block housing and cover	Cisco Technology, Inc.	030924/0352	GRIMM et al.
0370.2373C	971141	US	12961220	6-Dec-10	8,462,191	11-Jun-13	Automatic suppression of images of a video feed in a video call or videoconferencing system	Cisco Technology, Inc.	025457/0737	DEGRAZIA et al.
0370.2374C	971455	US	13171083	28-Jun-11	8,787,358	22-Jul-14	System for ad-hoc communication sessions	Cisco Technology, Inc.	026522/0057	Michael Edric TASKER
0370.2375C	971490	US	13032346	22-Feb-11	8,638,820	28-Jan-14	In-voicemail-session call transfers	Cisco Technology, Inc.	025849/0854	SHAFFER et al.
0370.2376C	972097	US	13247229	28-Sep-11	8,837,157	16-Sep-14	System for interconnecting electrical components	Cisco Technology, Inc.	026983/0746	Edward C. KUHAR
0370.2377C	972289	US	13191862	27-Jul-11	8,864,183	21-Oct-14	Mechanism to latch a cover closed	Cisco Technology, Inc.	026663/0626	MASON et al.
0370.2378C	972675	US	13282726	27-Oct-11	8,611,103	17-Dec-13	Latching injector/ejector	Cisco Technology, Inc.	027200/0458	THOMAS et al.
0370.2379C	974005	US	13252725	4-Oct-11	8,891,743	18-Nov-14	Gain control enhancement for modulated communications	Cisco Technology, Inc.	027080/0167 and 027080/0808	HANES et al.
0370.2380C	974704	US	13424914	20-Mar-12	8,907,749	9-Dec-14	Gigahertz common-mode filter for multi-layer planar structure	Cisco Technology, Inc.	027900/0718	Miroslav PAJOVIC

0370.2409C	977108	US	13436295	30-Mar-12	8,867,405	21-Oct-14	Voice service discovery	Cisco Technology, Inc.	027967/0158	YU et al.
0370.2381C	977372	US	13349229	12-Jan-12	8,782,565	15-Jul-14	System for selecting objects on display	Cisco Technology, Inc.	027564/0414	FRETWELL et al.
0370.2254CON	977263	US	13315948	9-Dec-11	8,804,496	12-Aug-14	Protecting multi-segment pseudowires	CISCO TECHNOLOGY, INC.	018416/0101	GUICHARD et al.

Electronic Acknowledgement Receipt

EFS ID:	22446828
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	99499
Filer:	D. Andrew Floam/Stephanie Jeppi
Filer Authorized By:	D. Andrew Floam
Attorney Docket Number:	0370.2043C (955474)
Receipt Date:	26-MAY-2015
Filing Date:	27-MAY-2008
Time Stamp:	16:41:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	ExecutedCombinedIssuedPOA.pdf	500656 2c94fa083c1d22ce5291f33643c74dd004f7785d	no	60

Warnings:	
Information:	

Total Files Size (in bytes):	500656

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	11/18/2014	8892149	0370.2043C (955474)	8388

99499 7590 10/29/2014

Edell, Shapiro, & Finnan, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 1274 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Shmuel Shaffer, Palo Alto, CA;
Amit Barave, Sunnyvale, CA;
Steven Christenson, Campbell, CA;
Marcelo Oliveira, San Jose, CA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

21186 7590 07/24/2014
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

TITLE OF INVENTION: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	10/24/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
JAIN, ANKUR	2649	455-519000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Cisco Technology, Inc.
(B) RESIDENCE: (CITY and STATE OR COUNTRY): San Jose, CA

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☒ Payment by credit card. Form PTO-2038 is attached.
- ☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 050460 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
  NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
  NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☐ Applicant changing to regular undiscounted fee status.
  NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Mark J. DeBoy/ Date October 17, 2014

Typed or printed name Mark J. DeBoy Registration No. 66983

Motorola - Exhibit 1028 - Page 64

Electronic Patent Application Fee Transmittal

Application Number:	12127397
Filing Date:	27-May-2008
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Filer:	Mark James DeBoy/Aja Turesko
Attorney Docket Number:	0370.2043C (955474)

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	1501	1	960	960
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	**960**

Electronic Acknowledgement Receipt

EFS ID:	20444291
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	99499
Filer:	Mark James DeBoy/Aja Turesko
Filer Authorized By:	Mark James DeBoy
Attorney Docket Number:	0370.2043C (955474)
Receipt Date:	17-OCT-2014
Filing Date:	27-MAY-2008
Time Stamp:	12:20:03
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$960
RAM confirmation Number	9201
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part / zip	Pages (if appl.)

1	Issue Fee Payment (PTO-85B)	PTO-85B.pdf	128340 69f7056e39532ca2e208d6b88d32abc1d203b1bd	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30835 1d7061ff5368a110248ee49f9978a06257023644	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	159175	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/127,397	05/27/2008	Shmuel Shaffer	0370.2043C (955474)

CONFIRMATION NO. 8388

POA ACCEPTANCE LETTER

99499
Edell, Shapiro, & Finnan, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

OC000000069802390

Date Mailed: 07/28/2014

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/23/2014.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/zmoguss/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1

CONFIRMATION NO. 8388

POWER OF ATTORNEY NOTICE

21186
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

OC000000069802346

Date Mailed: 07/28/2014

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/23/2014.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/zmoguss/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

21186 7590 07/24/2014

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER
JAIN, ANKUR

ART UNIT	PAPER NUMBER
2649	

DATE MAILED: 07/24/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

TITLE OF INVENTION: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	10/24/2014

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

21186 7590 07/24/2014
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

TITLE OF INVENTION: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	10/24/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
JAIN, ANKUR	2649	455-519000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Motorola - Exhibit 1028 - Page 72

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 07/24/2014

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	

ART UNIT	PAPER NUMBER
2649	

DATE MAILED: 07/24/2014

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 12/127,397	Applicant(s) SHAFFER ET AL.	
	Examiner ANKUR JAIN	Art Unit 2649	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *3/27/14*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-7, 10-17, and 19*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☒ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/ANKUR JAIN/
Primary Examiner, Art Unit 2649

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Mark J. DeBoy..

The application has been amended as follows:

1. (Currently Amended) An apparatus, comprising:

an information collection component of an interoperability server that receives, from an endpoint, an advertisement of information associated with the endpoint;

an analysis component of the interoperability server that dynamically determines if [[an]]the endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of the advertisement ~~of information associated with the endpoint~~ or information determined based on the adherence of the endpoint with a predefined floor control mechanism; and

a dynamic proxy component of the interoperability server that~~: is employed to~~ makes a determination to dynamically insert a proxy that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity;

when the endpoint is conforming with the capabilities, connecting the endpoint directly to the VTG without the proxy, and

connects the endpoint to the VTG in response to the determination.

2. (Original) The apparatus of claim 1, wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams.

3. (Original)The apparatus of claim 1, further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization.

4. (Original)The apparatus of claim 1, further comprising an identity collection component that receives an identity of the endpoint to assess a security risk associated with the endpoint.

5. (Original) The apparatus of claim 4 wherein the identity collection component employs credentials resident on the endpoint.

6. (Currently Amended)The apparatus of claim 5, wherein the security risk associated with the endpoint is that the endpoint transmits into a given VTG without adhering with the floor control ~~policy~~ mechanism ~~of the system~~.

7. (Original)The apparatus of claim 1, further comprising an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis.

8-9. (Cancelled).

10. (Currently Amended) The apparatus of claim 1 wherein ~~the~~ parameters of the VTG are dynamically altered to conceal the VTG from the ~~identified~~ endpoint and prevent the endpoint from streaming into the VTG.

11. (Original) The apparatus of claim 1, wherein the dynamic proxy component dynamically establishes a communication path between the endpoint and one or more disparate endpoints based in part on the analysis.

12. (Original) The apparatus of claim 1, further comprising a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG.

13. (Currently Amended) A method, comprising:

receiving an advertisement of information associated with an endpoint;

identifying information associated with adherence of the endpoint with a predefined floor control mechanism;

analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG); ~~via a proxy; and;~~ wherein the determination is based in part on an analysis of at least one of the advertisement from the endpoint or information determined based on adherence of the endpoint with the predefined floor control mechanism;

when the endpoint is identified as non-conforming with a floor control mechanism, dynamically inserting a proxy between the endpoint and the VTG;

when the endpoint is conforming with the floor control mechanism, connecting the endpoint directly to the VTG without the proxy; and

wherein the proxy conforms with the floor control mechanism.

14. (Original) The method of claim 13, further comprising identifying at least one of media capability information or identity information associated with the endpoint.

15. (Original) The method of claim 13, further comprising identifying the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

16. (Previously Presented) The method of claim 15, wherein an entity is conforming with the floor control mechanism if it adheres to predefined quality of service, rules of transmission, and trusted endpoint.

17. (Currently Amended) A ~~system~~ method, comprising:

~~means for receiving~~ advertising from an endpoint, information associated with [[an]]the endpoint;

connecting to a virtual talk group (VTG) in response to a determination by an interoperability server of whether the endpoint should be connected to a virtual talk group (VTG);

when the endpoint is identified as non-conforming with a floor control mechanism, dynamically inserting a proxy between the endpoint and the VTG;

when the endpoint is conforming with the floor control mechanism, connecting the endpoint directly to the VTG without the proxy;

wherein the determination is based in part on an analysis of at least one of the advertised information associated with the endpoint or information determined based on adherence of the endpoint with a predefined floor control mechanism;

wherein the proxy conforms with the floor control mechanism.

~~means for identifying information associated with adherence of the endpoint with a predefined floor control mechanism;~~

~~means for analyzing the identified advertised information to evaluate if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and~~

~~means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism~~.

18. (Cancelled).

19. (Currently Amended) ~~The system of~~ The method according to claim 17, ~~further~~ connecting to the VTG ~~comprising means for~~ comprises dynamically establishing a communication path between the ~~devices~~ endpoint and the proxy based in part on the analysis.

20-27. (Cancelled).

Allowable Subject Matter

Claims 1-7, 10-17, and 19 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art does NOT teach:

An apparatus, comprising:

an information collection component of an interoperability server that receives, from an endpoint, an advertisement of information associated with the endpoint;

an analysis component of the interoperability server that dynamically determines if [[an]]the endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of the advertisement ~~of information associated with the endpoint~~ or information determined based on the adherence of the endpoint with a predefined floor control mechanism; and

a dynamic proxy component of the interoperability server that~~: is employed to~~

makes a determination to dynamically insert a proxy that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity;

when the endpoint is conforming with the capabilities, connecting the endpoint directly to the VTG without the proxy, and

connects the endpoint to the VTG in response to the determination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANKUR JAIN whose telephone number is (571)272-9747. The examiner can normally be reached on M-F, 9:00 am to 4:00 pm, EST.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANKUR JAIN/

Primary Examiner, Art Unit 2649

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	Art Unit
	ANKUR JAIN	2618

CPC- SEARCHED		
Symbol	Date	Examiner
H04W24/04	7/18/2014	AJ
H04B1/3877	7/18/2014	AJ

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	519	2/3/2012	AJ

SEARCH NOTES		
Search Notes	Date	Examiner
EAST Search attached.	2/3/2012	AJ

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
455	519	7/18/2014	AJ

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	**Art Unit**
	ANKUR JAIN	2649

CPC								
Symbol							**Type**	**Version**
H04L		65	/	105			I	2013-01-01
H04L		65	/	605			F	2013-01-01
H04L		69	/	24			I	2013-01-01
			/					
			/					
			/					
			/					
			/					
			/					
			/					
			/					
			/					
			/					
			/					
			/					

CPC Combination Sets									
Symbol							**Type**	**Set**	**Ranking**	**Version**
			/							
			/							

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	16	
/ANKUR JAIN/ Primary Examiner.Art Unit 2649	7/18/14	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	FIG. 7

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	**Art Unit**
	ANKUR JAIN	2649

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION	
CLASS	SUBCLASS	CLAIMED	NON-CLAIMED
455	519	H 0 4 B 7 / 00 (2006.01.01)	

CROSS REFERENCE(S)					
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	16	
/ANKUR JAIN/ Primary Examiner.Art Unit 2649	7/18/14	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	FIG. 7

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	**Art Unit**
	ANKUR JAIN	2649

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	15	17												
2	2		18												
3	3	16	19												
4	4		20												
5	5		21												
6	6		22												
7	7		23												
	8		24												
	9		25												
8	10		26												
9	11		27												
10	12														
11	13														
12	14														
13	15														
14	16														

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	16	
/ANKUR JAIN/ Primary Examiner.Art Unit 2649	7/18/14	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	FIG. 7

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	12/127397.APP.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:00
L2	981	((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 (insert$5 or attach$5 or connect$6) near5 (proxy))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:09
L3	144	2 AND ((H04W24/04 OR H04W12/02 OR H04W12/08 OR H04W36/14 OR H04W36/18 OR H04W4/18 OR H04W24/00 OR H04W28/0215 OR H04W28/0273 OR H04W28/0289 OR H04W28/06 OR H04W36/22 OR H04W4/00 OR H04W4/16 OR H04W4/24 OR H04W4/26 OR H04W52/0251 OR H04W72/04 OR H04W76/045 OR H04W88/06 OR H04W28/02 OR H04W28/08 OR H04W36/0022 OR H04W36/023 OR H04W4/005 OR H04W4/02 OR H04W4/12 OR H04W4/20 OR H04W52/0232 OR H04W64/00 OR H04W72/048 OR H04W76/02 OR H04W76/046 OR H04W80/04 OR H04W80/06 OR H04W8/00 OR H04W8/24).CPC.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:10
L4	1646	(security) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:10
L5	122	4 AND ((H04W12/06 OR H04W12/02 OR H04W12/04 OR H04W12/08 OR H04W12/12 OR H04W48/08 OR H04W48/16 OR H04W4/16 OR H04W4/22 OR H04W76/023 OR H04W88/04 OR H04W8/005 OR H04W8/02 OR H04W8/22 OR H04W8/26 OR H04M11/025).CPC.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:11
L6	161	(floor near3 control$4) WITH (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:12
L7	43	6 AND ((H04W4/10 OR H04W76/005 OR H04W52/0216 OR H04W52/36 OR H04W88/02 OR H04W68/025 OR	US-PGPUB; USPAT;	OR	ON	2014/07/18 15:12

		H04W84/08 OR H04W4/06 OR H04W4/08 OR H04W68/00 OR H04W72/12 OR H04W76/02 OR H04W8/08 OR H04W8/18 OR H04W8/186 OR H04W92/02 OR H04W12/06 OR H04W28/26 OR H04W4/24 OR H04W74/04 OR H04W76/002 OR H04W76/028 OR H04W76/046 OR H04W80/10 OR H04W84/042 OR H04W8/26 OR H04W92/18 OR H04B1/3877 OR H04B2203/5495 OR H04B3/542).CPC.)	EPO; JPO; IBM_TDB			
L8	413	(alter$6 or updat$5 or modif$7 or chang$5 or switch$4 or transform$6) near6 parameter$4 near6 (conceal$6 or hid$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:13
L9	17	8 AND ((H04W24/02 OR H04W24/08 OR H04W36/0094 OR H04W4/14 OR H04W52/04 OR H04W52/265 OR H04W52/282 OR H04W52/287 OR H04W74/00 OR H04W74/0808 OR H04W84/12 OR H04W84/18 OR H04W88/08 OR H04B1/1027).CPC.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:14
L10	59	(floor near4 control$6) AND ((monitor$4 or check$4 or determin$6 or ascertain$4 or assess$6 or evaluat$6) near7 (qualit$4 near3 servic$4))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:15
L11	26	10 AND ((H04W4/06 OR H04W12/06 OR H04W28/10 OR H04W28/26 OR H04W4/00 OR H04W4/10 OR H04W76/005 OR H04W76/04 OR H04W80/10 OR H04W48/02 OR H04W4/001 OR H04W4/18 OR H04W52/12 OR H04W52/143 OR H04W52/241 OR H04W52/267 OR H04W52/286 OR H04W80/00 OR H04W92/18 OR H04W76/002 OR H04W76/027 OR H04B2203/5495 OR H04B3/542).CPC.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:16
L12	34	(trust$4 ADJ (client$4 or endpoint$2 or user$4 or device$2)) AND ((floor near3 control$4) or (talk ADJ group$4) or (talk near3 group$2))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:17
L13	5	12 AND ((H04W4/001 OR H04W4/02 OR H04W4/20 OR H04W4/22 OR H04W84/18 OR H04W4/08).CPC.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:17
L14	817	((gain$4 or start$4 or begin$6 or allow$6 or initiat$6) near5 (floor near3 control$4))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 15:17
L15	172	14 AND ((H04W4/10 OR H04W76/005 OR H04W4/08 OR H04W4/06 OR H04W52/0216 OR H04W72/02 OR H04W4/02 OR	US-PGPUB; USPAT;	OR	ON	2014/07/18 15:19

		H04W4/023 OR H04W4/026 OR H04W4/185 OR H04W72/0446 OR H04W76/022 OR H04W8/186 OR H04B7/0413 OR H04B7/0421 OR H04B7/0613 OR H04B7/0684 OR H04B15/00 OR H04B1/707).CPC.)	EPO; JPO; IBM_TDB			
S1	591	((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 (insert$5 or attach$5 or connect$6) near5 (proxy))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:42
S2	43	S1 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:43
S3	504	((SHMUEL) near2 (SHAFFER)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:45
S4	15	((AMIT) near2 (BARAVE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:45
S5	57	((STEVEN) near2 (CHRISTENSON)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:46
S6	33	((MARCELO) near2 (OLIVEIRA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:46
S7	557	S3 or S4 or S5 or S6	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:46
S8	1	S7 AND (VTG AND proxy AND floor).CLM.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:47
S9	2	("20070105579" | "20070270172").PN.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 12:13
S10	0	(security ADJ risk$2) WITH PTT WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
S11	0	(security ADJ risk$2) SAME PTT SAME ((determin$6 or ascertain$4 or decid$4 or	US-PGPUB;	OR	ON	2012/02/03 13:30

		assess$6 or evaluat$6) near5 identit$5)	USPAT; EPO; JPO; IBM_TDB			
S12	0	(security) SAME PTT SAME ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
S13	0	(security) SAME ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5) SAME VTG	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
S14	1110	(security) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:31
S15	17	(security near4 risk$2) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:31
S16	1110	(security) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:34
S17	1	S16 AND 455/517-519.CCLS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:35
S18	65	S16 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:35
S19	1	12/127397.APP. AND (alter$4 WITH conceal$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:25
S20	2	(alter$4 near5 parameters near5 group) AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:32
S21	321	(alter$6 or updat$5 or modif$7 or chang$5 or switch$4 or transform$6) near6	US-PGPUB;	OR	ON	2012/02/03 15:45

		parameter$4 near6 (conceal$6 or hid$5)	USPAT; EPO; JPO; IBM_TDB			
S22	8	S21 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:45
S23	2	"20070105579"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 12:34
S24	1	12/127397.APP.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:03
S25	1	12/127397.APP. AND (rule$2 near3 transmission$2)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:04
S26	0	(allow$4 near6 ((floor near3 control$4) or (talk near3 group) or (talk ADJ group$2))) WITH (qualit$4 AND trust$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:13
S27	0	(allow$4 near6 ((floor near3 control$4) or (talk near3 group) or (talk ADJ group$2))) WITH (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:14
S28	0	(floor near3 control$4) near7 (based or according$4) near7 ((qualit$4) AND trust$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:16
S29	3	(floor near3 control$4) near7 (based or according$4) near7 (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:16
S30	146	(floor near3 control$4) WITH (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:17
S31	0	(floor near3 control$4) WITH ((qualit$4) AND trust$4)	US-PGPUB;	OR	ON	2012/10/06 13:18

			USPAT; EPO; JPO; IBM_TDB			
S32	343	(floor near3 control$4) WITH (secur$5 or trust$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:18
S33	0	(floor near3 control$4) WITH (trust$4 ADJ (endpoint$2 or user$4 or client or device$2))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:19
S34	43	S30 AND ("455".CLAS. or "370".CLAS.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:20
S35	0	((gain$4 or start$4 or begin$6 or allow$6 or initiat$6) near5 (floor near3 control$4)) WITH (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:23
S37	0	(floor near4 control$6) SAME ((monitor$4 or check$4 or determin$6 or ascertain$4 or assess$6 or evaluat$6) near7 (qualit$4 near3 servic$4))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:28
S39	4	(floor near4 control$6) AND ((conform$4 or comply$4) near6 (qualit$4 near3 servic$4))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:43
S40	2	"20070105579" AND quality	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:49
S41	5	(US-20040224668-$ or US-20070105579-$ or US-20090093235-$ or US-20070127374-$ or US-20060223519-$).did.	US-PGPUB	OR	ON	2012/10/06 13:58
S42	0	S41 AND trust$5	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:59
S43	2	(trust$4 ADJ endpoint$3 ADJ identit$5)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2012/10/06 13:59

			IBM_TDB			
S44	98	(trust$4 ADJ endpoint$3)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 14:00
S45	2	S44 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 14:00
S46	1	(trust$4) WITH ((floor near3 control$4) or (talk ADJ group$4) or (talk near3 group$2))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 14:02
S48	1	"8233460".pn.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 15:11
S49	1	"5206855".pn.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 15:37
S50	1	12/127397.APP.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 18:29
S51	1	12/127397.APP. AND (insert$6 WITH proxy)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 18:41
S52	2	"20040224668" AND (proxy ADJ server$2)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 18:55
S53	1	12/127397.APP. AND (floor WITH control$4 WITH proxy)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 19:06
S54	1	12/127397.APP. AND (adher$4 WITH proxy)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2013/03/09 19:10

			IBM_TDB			
S55	2	"20040224668"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 19:22
S56	0	"20040224668" AND (PTT or PT or floor$2)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 19:23
S57	2	"20070105579"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 19:42
S58	2	"20070105579" AND quality	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 19:42
S59	2	"20040224668"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2013/03/09 20:12
S60	1	12/127397.APP. AND (mechanism WITH adher$6)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/14 13:30
S61	1	12/127397.APP. AND (adher$6)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/14 13:32
S62	1	12/127397.APP. AND (proxy WITH adher$6)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/14 13:35
S63	1	12/127397.APP. AND (proxy WITH trust$6)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/14 13:37
S64	1	12/127397.APP. AND (negotiation)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/07/14 13:54

			IBM_TDB			
S65	1	12/127397.APP. AND (analysis ADJ component$2)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/14 14:05
S66	2	"20030211828"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 15:13
S67	1	12/127397.APP.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 17:21
S68	839	(Shaffer near4 Shmuel$4)".INV. "	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 17:21
S69	27	(Barave near4 Amit$4)".INV. "	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 17:22
S70	92	(Christenson$4 near4 Stev$4)".INV. "	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 17:22
S71	54	(Oliveira$4 near4 Marcelo$4)".INV. "	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 17:22
S72	929	S68 or S69 or S70 or S71	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 17:22
S73	6	S72 AND (virtual SAME proxy).CLM.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 17:23
S74	31	(Cisco.as.) AND (virtual SAME proxy).CLM.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/07/16 17:25

			IBM_TDB			
S75	3	(Cisco.as.) AND (virtual SAME proxy SAME talk$4).CLM.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/16 17:26
S76	2	"20060255998"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 11:01
S77	2	"20060087981"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 11:07
S78	1	13/203863.APP.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 11:21
S79	1	12/127397.APP.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 13:04
S80	1	S79 AND (operat$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 13:04
S81	2	"20020059434"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 13:04
S82	2	"20100144338"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 15:15
S83	1	"20110195720"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 15:18
S84	1	11/563193.APP.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/07/17 15:52

			IBM_TDB			
S85	1	11/563193.APP. AND (album SAME lyric$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 15:52
S86	1	11/563193.APP. AND (lyric$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/17 15:59
S87	2	"20090285143"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2014/07/18 11:36

7/ 18/ 2014 3:20:25 PM
C:\ Users\ ajain1\ Documents\ EAST\ Workspaces\ 12127397.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	12/127,397
First Named Inventor	:	Shmuel Shaffer
Confirmation No.	:	8388
Filed	:	May 27, 2008
TC/A.U.	:	2649
Examiner	:	JAIN, ANKUR
Customer No.	:	99499
Docket No.	:	0370.2043C (955474)
Title	:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

REVOCATION AND NEW POWER BY ASSIGNEE AND STATEMENT UNDER 37 C.F.R. §3.73(b)

The Assignee of the entire right, title, and interest in the above-identified application hereby revokes all previously granted powers and grants the registered practitioners of EDELL, SHAPIRO & FINNAN, LLC included in the Customer Number provided below power to act, prosecute, and transact all business in the U.S. Patent and Trademark Office in connection with this application, any applications claiming priority to this application, and any patents issuing therefrom.

The assignee certifies that to the best of its knowledge and belief it is the owner of the entire right, title, and interest in and to the above-identified application as evidenced by:

☐ An assignment document, a copy of which is enclosed herewith;

☒ An assignment previously recorded in the U.S. Patent and Trademark Office at Reel 021003, Frame 0843.

☒ Please direct all correspondence concerning this application to:

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd., Suite 750
Gaithersburg, MD 20878
(301) 424-3640
CUSTOMER NUMBER: **99499**

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

Date: JUL 16 2014

Signature: _____
Name: Dan H. Lang
Title: Vice President and Assistant Secretary
Company: Cisco Technology, Inc.

Electronic Acknowledgement Receipt

EFS ID:	19658821
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	21186
Filer:	D. Andrew Floam/Amanda Johnson
Filer Authorized By:	D. Andrew Floam
Attorney Docket Number:	1370.356US1
Receipt Date:	23-JUL-2014
Filing Date:	27-MAY-2008
Time Stamp:	13:54:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	ExecutedPOA.pdf	61844 7aefc605cb89dade44a4578cfacbd60f966eeb8d	no	1

Warnings:	
Information:	

Total Files Size (in bytes):	61844

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:	Shmuel Shaffer et al.	Examiner: Ankur Jain	
Serial No.:	12/127,397	Group Art Unit: 2649	
Filed:	May 27, 2008	Docket No.: 1370.356US1	
Customer No.:	21123	Confirmation No.: 8388	
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief- Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The Appeal Brief is presented in response to the Notice of Panel Decision from Pre-Appeal Brief Review mailed on December 18, 2013 and further in support of the Notice of Appeal to the Board of Patent Appeals and Interferences, filed on November 1, 2013, from the Final Rejection of claims 1-7, 10-17, and 19 of the above-identified application, as set forth in the Office Action mailed on July 18, 2013.

The Appellants respectfully request consideration and reversal of the Examiner's rejections of the pending claims. If necessary, please charge any additional fees or credit overpayment to Deposit Account 19-0743.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

TABLE OF CONTENTS

Page

1. REAL PARTY IN INTEREST 2
2. RELATED APPEALS AND INTERFERENCES 3
3. SUMMARY OF CLAIMED SUBJECT MATTER 4
4. ARGUMENT 8

CLAIMS APPENDIX 16

EVIDENCE APPENDIX 19

1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application is the Assignee, Cisco Technology, Inc., as evidenced by the Assignment from the Inventors recorded on May 27, 2008, at Reel 021003, Frames 0843-0847.

2. RELATED APPEALS AND INTERFERENCES

There are no other Appeals or Interferences known to Appellants that will have a bearing on the Board's decision in the present Appeal.

3. SUMMARY OF CLAIMED SUBJECT MATTER

As illustrated, described and claimed in the present application, aspects of the present inventive subject matter include, but are not limited to, an interoperability system that allows two-way radios to utilize Internet Protocol (IP) networking while still preserving security and talk group features such as talker-id. Specifically, a virtual talk group may have a predefined floor mechanism that would ordinarily prevent an endpoint such as a two-way radio from communicating with it. A system may be provided that dynamically determines whether the endpoint adheres to the predefined floor control mechanism. If so, then the system may simply connect the endpoint to the virtual talk group. If not, however, the system may dynamically insert a proxy that does adhere to the predefined floor control mechanism, allowing the endpoint to connect to the virtual talk group through that dynamically inserted proxy.

INDEPENDENT CLAIM 1

Independent claim 1 describes an apparatus. This apparatus is depicted as reference numeral 102 in FIG. 3 and described in paragraphs [0036]-[0047]. The apparatus includes an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism. This component is depicted as reference numeral 306 in FIG. 3 and paragraph [0040]. The concept of dynamically determining if the endpoint should be connected to the VTG is described in paragraph [0056]. The apparatus also includes a dynamic proxy component that is employed to dynamically insert a proxy that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity. This component is depicted as reference numeral 308 in FIG. 3 and described in paragraph [0046]. The concept of dynamically inserting the proxy is described in the last sentence of paragraphs [0046] ("If another endpoint identifies that the monitored endpoint as non-conforming with the floor control policy of the system, the dynamic proxy component 308 can dynamically insert a proxy between the endpoint 104 and the VTG") and [0056] ("If it is

identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted between the endpoint and the VTG").

DEPENDENT CLAIM 10

Dependent claim 10 further limits the apparatus of claim 1 to indicate that the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG. This is described in paragraph [0035].

INDEPENDENT CLAIM 13

Independent claim 13 describes a method including the act of receiving information associated with an endpoint. This is described in paragraph [0059] and reference numeral 904 of FIG. 9. The method also includes the act of identifying information associated with adherence of the endpoint with a predefined floor control mechanism. This is also described in paragraph [0059] and reference numeral 904 of FIG. 9. The method also includes the act of analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy. This is described in paragraph [0059] and as reference numeral 908 of FIG. 9. The method also includes the act of dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism. This is partially described in paragraph [0059] and as reference numeral 910 of FIG. 9, but also described in more detail in the last sentence of paragraphs [0046] ("If another endpoint identifies that the monitored endpoint as non-conforming with the floor control policy of the system, the dynamic proxy component 308 can dynamically insert a proxy between the endpoint 104 and the VTG") and [0056] ("If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted between the endpoint and the VTG").

INDEPENDENT CLAIM 17

Independent claim 17 describes a system including means for receiving information associated with an endpoint. This is described in paragraph [0059] and reference numeral 904 of FIG. 9. The corresponding structure for this element is the information collection component 302 of the IS 102 of FIG. 3, and more particularly the capability collection component 402 of FIG. 4. The system also includes means for identifying information associated with adherence of the endpoint with a predefined floor control mechanism. This is also described in paragraph [0059] and reference numeral 904 of FIG. 9. The corresponding structure for this element is the information collection component 302 of the IS 102 of FIG. 3, and more particularly the capability collection component 402 of FIG. 4. The system also includes means for analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy. This is described in paragraph [0059] and as reference numeral 908 of FIG. 9. The corresponding structure for this element is the analysis component 306 of FIG. 3. The system also includes means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism. This is partially described in paragraph [0059] and as reference numeral 910 of FIG. 9, but also described in more detail in the last sentence of paragraphs [0046] ("If another endpoint identifies that the monitored endpoint as non-conforming with the floor control policy of the system, the dynamic proxy component 308 can dynamically insert a proxy between the endpoint 104 and the VTG") and [0056] ("If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted between the endpoint and the VTG"). The corresponding structure for this element is the dynamic proxy component 308 of FIG. 3.

This *Summary of Claimed Subject Matter* is provided with citations to specific locations in the specification and figures of the present application. Due to the specificity of these citations, as should be readily understood, full understanding of the subject matter of the citations may require the context of the surrounding paragraphs and figure elements. Further, this summary does not provide an exhaustive or exclusive view of the present subject matter, and

Appellants refer to each of the claims and its legal equivalents for a complete statement of the invention.

4. ARGUMENT

The Rejection of Claims Under § 103

Claims 1-3, 7, 10-17, and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaffer et al. (U.S. Publication No. 2007/0105579 A1; hereafter "Shaffer"), in view of Shell et al. (U.S. Publication No. 2004/0224668 A1; hereafter "Shell"), and further in view of Parkkinen et al. (U.S. Publication No. 2011/0004636; hereafter "Park").

Claims 4-6 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaffer in view of Shell and Park, as applied to Claims 1 and 4-5, and further in view of Grealish et al. (U.S. Publication No. 2009/0093235 A1; hereafter "Grealish").

Independent claims 1, 7, and 17

Claim 1 includes the following element:

a dynamic proxy component that is employed to ***dynamically insert a proxy*** that adheres to the predefined floor control mechanism ***when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism***, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity. (emphasis added)

Claim 7 includes the following element:

dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism. (emphasis added)

Claim 17 includes the following element:

means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism. (emphasis added)

The main disagreement in this case appears to be the meaning of these elements, and specifically the meaning of ***dynamically inserting a proxy***.

The cited prior art teaches systems where the proxy is always present, at least as far back as when the system was first set up. At a certain time, the system decides to access this proxy, but the proxy is always present. Appellants respectfully assert that this is what is known in the art as a "static" proxy, because it is always present. Notably, this static proxy is also present before the system has been run (i.e., prior to execution).

The Examiner is asserting that the use of this type of static proxy falls under the meaning of dynamically inserting a proxy. This reflects the primary disagreement for decision on appeal, as it appears evident that if this type of static proxy does not fall under the meaning of dynamically inserting a proxy, the prior art would have failed to show an element in each of the independent claims and thus those claims would be allowable. This disagreement can be broken up into two parts: (1) the meaning of "dynamic" and (2) whether "inserting a proxy" is equivalent to "employing a proxy."

(1) The meaning of "dynamic"

As the Examiner correctly points out, MPEP 2111 lays out the various tests used in determining the meaning of a claim term. The Examiner also correctly points out that this section allows the patentee to act as his own lexicographer as long as the intent is express in the written description. Appellants agree with this portion of the Examiner's analysis and also agree that, in this case, the patentee has not acted as his own lexicographer with respect to the term "dynamic" relative to "inserting a proxy". The Specification simply assumes that the plain and ordinary meaning of the term "dynamically" as it is used in the computer science arts would be understood, and uses the term throughout the specification in a manner consistent with that definition.

Where the disagreement lies is how the Examiner is interpreting the plain and ordinary meaning of "dynamically."

The Examiner, even after repeated attempts on the part of the Appellants, has failed to produce any definition of the term "dynamically." The Examiner appears to be under the mistaken impression that, because the term is not explicitly defined in the Specification, the term can be interpreted however the Examiner wants, or at least interpreted so broadly that it has no

meaning.[1] It is, of course, difficult to debate the meaning of a claim term when the Examiner provides no proposed definition for the term. At the very least, however, it would appear that the Examiner feels that the term "dynamically inserting a proxy" would cover the "use" of a "static proxy."

Perhaps most tellingly, the Examiner cites several portions of the MPEP to support his interpretation of the term "dynamically", yet these portions are selectively cited and lack a key element of the analysis required to interpret a claim. Appellants respectfully submit that if, in this case, a claim term is not explicitly defined in the Specification, it should be afforded its plain meaning to one of ordinary skill in the art at the time of the invention. This is stated as such in MPEP 2111.01 ("Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification. The plain meaning of a term means the ordinary and customary meaning **given to the term by those of ordinary skill in the art at the time of the invention.**").

Nowhere in the Office Action does the Examiner acknowledge his responsibility to factor in what those of ordinary skill in the art would believe at the time of the invention, and indeed the analysis provided lacks any evidence showing the meaning to those of ordinary skill in the art.

In contrast, Appellants have provided multiple arguments and evidence as to the meaning of the term "dynamic" to one of ordinary skill in the art, yet the Examiner has failed to address or even acknowledge this evidence. Specifically, Appellants have provided a definition from a computer dictionary clearly indicating the meaning of the term "dynamic" as being such that a "static proxy" would not qualify. Specifically, this definition states that "dynamic" is "used of any computing resource that is created or allocated when needed, rather than having a more permanent existence."[2]

This definition is also consistent with the Specification. While no explicit definition of "dynamic" is used in the Specification, paragraph [0026] states: "[t]he subject disclosure relates generally to communication networks and in particular to an interoperability system that **facilitates a dynamic insertion of a media proxy based on capability negotiation.**" Since the

[1] See Final Office Action, page 4 ("However, the Examiner would like to note that there is no definition of 'dynamically' in the specification to mean what Appellant is now arguing this claimed feature to mean. Thus, Appellant's argument is moot and must be withdrawn.").
[2] Dick Pountain, New Penguin Dictionary of Computing, Penguin Books (2001).

insertion of a media proxy is based on capability negotiation, which does not take place until the system is up and running (and negotiating the capabilities), then the dynamic insertion of the media proxy must mean that it was inserted when needed (and not before).

This definition is also consistent with the claims. Claim 13 states "dynamically inserting a proxy between the endpoint and the VTG ***when the endpoint is identified as non-conforming with the floor control mechanism***." Again, since the endpoint is not identified as non-conforming until the system is up and running (and performing such identification), then the dynamic insertion of the proxy must mean that it was inserted when needed (and not before).

The Examiner's definition is not based on what one of ordinary skill in the art would understand at the time of the invention, and is also inconsistent with the provided dictionary definition, as well as the Specification and claims. A static proxy could not possibly be inserted based on capability negotiation, because a static proxy would have to be in existence in the system before such capability negotiation could take place. The Examiner's interpretation also, as the Examiner freely admitted in an Interview conducted on October 22, 2013, renders the term "dynamically" meaningless, which is contrary to settled law.[3]

For these reasons, Appellants respectfully request that Appellants' proffered definition of "dynamic" is correct.

(2) Whether "inserting a proxy" is equivalent to "employing a proxy."

The Examiner also makes the rather confusing argument that somehow "inserting a proxy" is equivalent to "employing a proxy." Appellants do not fully understand how the Examiner can make this assertion, as the plain meaning of inserting is different than employing, both to one of ordinary skill in the computer arts at the time of the invention and to one of skill in any art. Inserting involves an act of placing something somewhere where it wasn't previously present, while employing involves using that something in some way. Indeed, if anything, "employ" appears to be a broader term, as it can be used whether or not the "something" in question was ever inserted.

[3] Cat Tech LLC v. Tube-Master, Inc., 528 F.3d 871, 885 (Fed. Cir. 2008) (refusing to adopt a claim construction that would render a claim limitation meaningless)."

The Examiner attempts to cite to statements made by Appellants in a previous response and to places in the Specification as evidence for an assertion that somehow "inserting a proxy" is equivalent to "employing a proxy." It is important to keep in mind that the Examiner is now attempting to argue that the claim language is in fact **broader** than the plain meaning to one of ordinary skill in the art. Thus, it is not the Appellants attempting to be their own lexicographer by attempting to use statements in the Specification, but the Examiner attempting to force the Appellants to be their own lexicographer based on a statement made in a response during prosecution, the statement having nothing to do with the scope of the claims but rather merely providing support for an amendment. Nevertheless, the standard for being one's own lexicographer is the same: Under MPEP 2111, unless the patentee rebuts the presumption by "clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s)", the term must be afforded its ordinary and customary meaning. Not only does the Examiner fail to meet this burden, as will be shown, the argument the Examiner is utilizing makes no sense to begin with.

The Examiner bases his argument on a statement made by Appellants on Page 1 of the Remarks of the Response filed January 4, 2013. In that response, Appellants had added the term "insert" in front of the term "proxy", and also added "that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism" after the term "proxy". Appellants then pointed to paragraph [0056] as support for this amendment. The Examiner appears to utilize this as some sort of "admission" that the phrase "inserting a proxy" means "employing a proxy". Appellants respectfully disagree. Not only was this not Appellants' intent with the statement, even if one could argue that such a statement may have implied equivalency, it would clearly not meet the standard of clearly disavowing the plain meaning of a claim term as required by MPEP 2111.

The Examiner may be confused by the fact that, in FIG. 7, step 714 states "employ dynamic proxy" and the Appellants did state that "[t]he paragraph ([0056]) also goes on to describe how the proxy is dynamically inserted at 714." The Examiner may be assuming this means that employing a dynamic proxy is the same as dynamically inserting it. However, this misconstrues paragraph [0034]. Paragraph [0034] actually describes multiple different

embodiments, and the support for the amendment is found in a different embodiment than the Examiner apparently is relying upon. Paragraph [0034] states, with regard to step 714:

> At 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG. In one embodiment, if the endpoint is admitted into a VTG without proper credentials, it can be monitored for its adherence with a floor control policy, such as a specified rule of transmission. **If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted** between the endpoint and the VTG.

Thus, while this paragraph does describe the potentially broader embodiment of "employing a dynamic proxy", it also describes a narrower embodiment where a proxy is dynamically inserted if it is identified that the monitored endpoint is non-conforming. **It is this narrower embodiment that is claimed, and was being pointed to by Appellants in the response**. Indeed, Appellants are confused as to why the Examiner feels the need to try and force the Appellant into the "can be employed" language from one embodiment while "dynamically inserting" is recited nearly verbatim in the other embodiment.

The result of all this, of course, is that the prior art still does not teach or suggest the claims. Specifically, Shaffer discloses a proxy media service (PMS), but this service is present all the time, and handles communication with both endpoints in adherence with the floor control mechanism (full duplex) and endpoints not in adherence (half duplex). This is depicted as PMS 220 in FIG. 5, reproduced below.

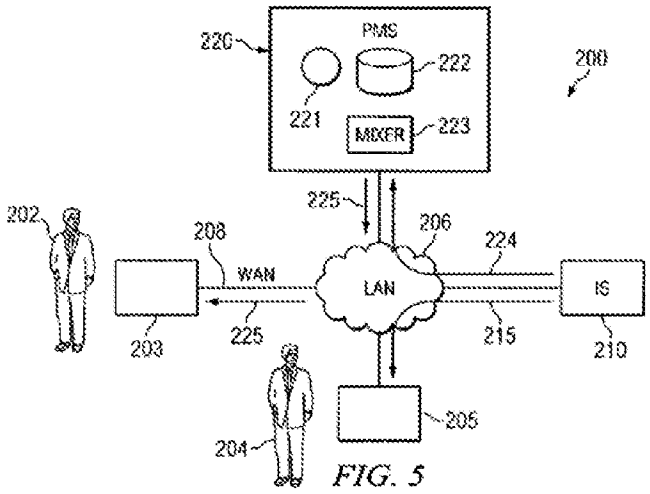


FIG. 5

There is nothing dynamic about the use of this proxy; it is simply used all the time. Furthermore, this proxy is not inserted dynamically at all, let alone "when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism."

Shell discloses a generic proxy server, but again there is nothing suggesting that this proxy server is dynamically inserted, as opposed to simply always being present, let alone specifically being dynamically inserted when an endpoint is determined to not be in adherence with a floor control mechanism. Instead, the proxy server in Shell is simply always present and is used or not used depending upon whether or not a particular connection requires it. This is indeed implied in paragraph [0090], which states "[f]or example, if the most appropriate connection method is determined to be through a proxy server, proxy 225 may cause a connection to be established to ***the*** proxy server." (emphasis added). Note that this sentence says "the" proxy server, implying that the proxy server already exists in the system, at least at the time this determination is made.

As such, independent claims 1, 13, and 17 are in condition for allowance.

Dependent claim 10

Claim 10, being dependent upon allowable parent claims, are also in condition for allowance for the same reasons as described above with respect to the independent claim. Furthermore, Appellants respectfully disagree with the Examiner's analysis of claim 10. The Examiner argues that paragraph [0065] of Shaffer teaches that "the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG".

The Examiner argues that the claimed limitation "reads on the priority of the VTG being changed based on an event associated with the VTG." First of all, the priority of the VTG in Shaffer is not changed. Rather, this paragraph describes how a maximum talk time for a user connected in a VTG can vary based on the priority of an event associated with the VTG. While "priority" is a parameter in the system as a whole, it is not a parameter of the VTG, but is rather a parameter of a call or session. Nevertheless, changing the priority does not "conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" as set forth

in claim 10. Notably, this argument was presented in the last response by the Appellants, but the Examiner failed to address this argument in the Final Office Action, merely stating that the Examiner "firmly submits" that this element is contained in Shaffer.

Dependent claims 2-7, 11-12, 14-16, and 19

These claims are not argued separately in this appeal and will rise and fall with the independent claims from which they depend.

SUMMARY

It is respectfully submitted that the art cited does not render the claims unpatentable. Reversal of the rejections and allowance of the pending claims are respectfully requested.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(408) 278-4056

Date March 27, 2014 By / Marc Hanish /
Marc S. Hanish
Reg. No. 42,626

CLAIMS APPENDIX

1. An apparatus, comprising:

an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism; and

a dynamic proxy component that is employed to dynamically insert a proxy that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity.

2. The apparatus of claim 1, wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams.

3. The apparatus of claim 1, further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization.

4. The apparatus of claim 1, further comprising an identity collection component that receives an identity of the endpoint to assess a security risk associated with the endpoint.

5. The apparatus of claim 4 wherein the identity collection component employs credentials resident on the endpoint.

6. The apparatus of claim 5, wherein the security risk associated with the endpoint is that the endpoint transmits into a given VTG without adhering with the floor control policy of the system.

7. The apparatus of claim 1, further comprising an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis.

10. The apparatus of claim 1 wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG.

11. The apparatus of claim 1, wherein the dynamic proxy component dynamically establishes a communication path between the endpoint and one or more disparate endpoints based in part on the analysis.

12. The apparatus of claim 1, further comprising a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG.

13. A method, comprising:

receiving information associated with an endpoint;

identifying information associated with adherence of the endpoint with a predefined floor control mechanism;

analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism.

14. The method of claim 13, further comprising identifying at least one of media capability information or identity information associated with the endpoint.

15. The method of claim 13, further comprising identifying the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

16. The method of claim 15, wherein an entity is conforming with the floor control mechanism if it adheres to predefined quality of service, rules of transmission, and trusted endpoint identity.

17. A system, comprising:

means for receiving information associated with an endpoint;

means for identifying information associated with adherence of the endpoint with a predefined floor control mechanism;

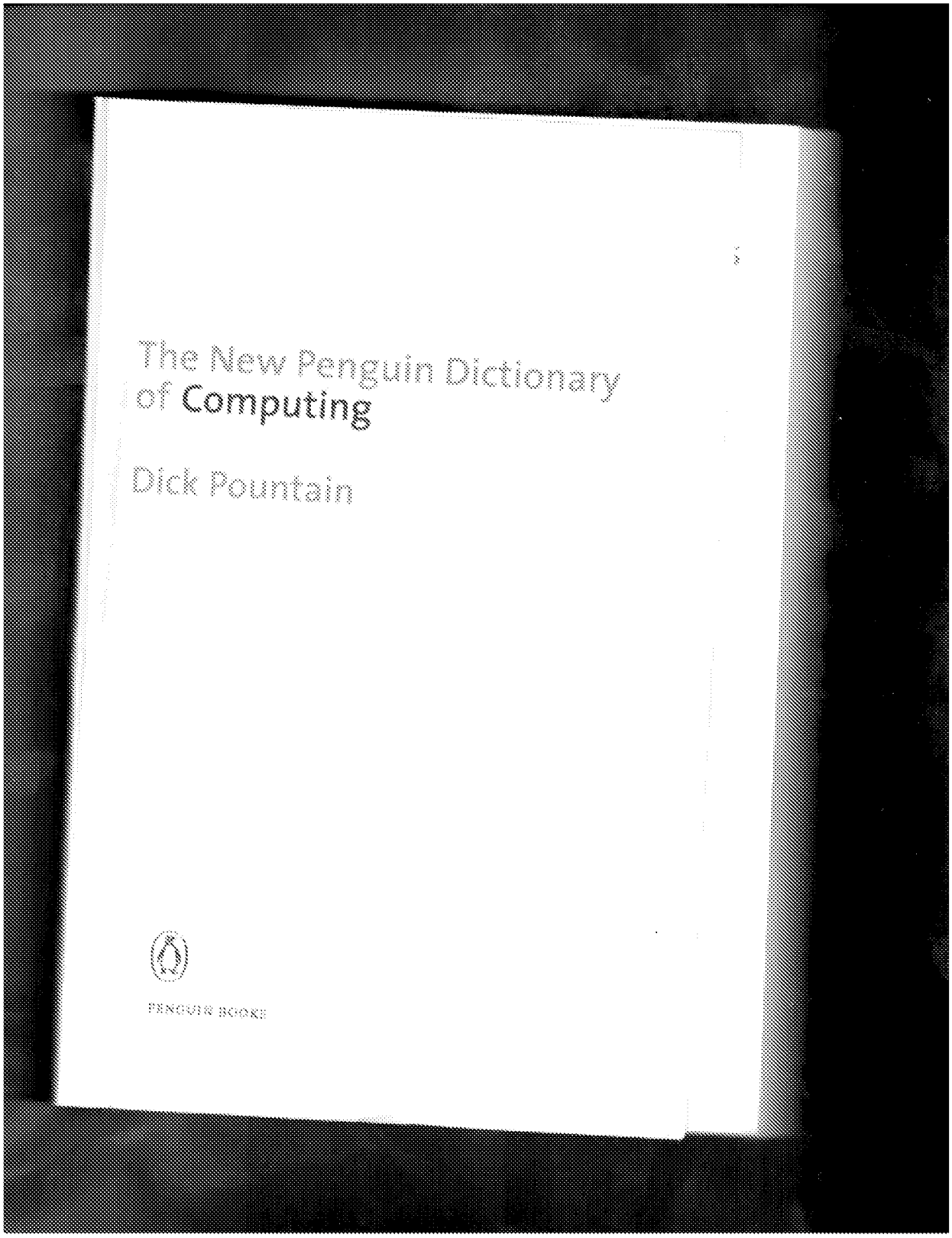
means for analyzing the identified information to evaluate if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

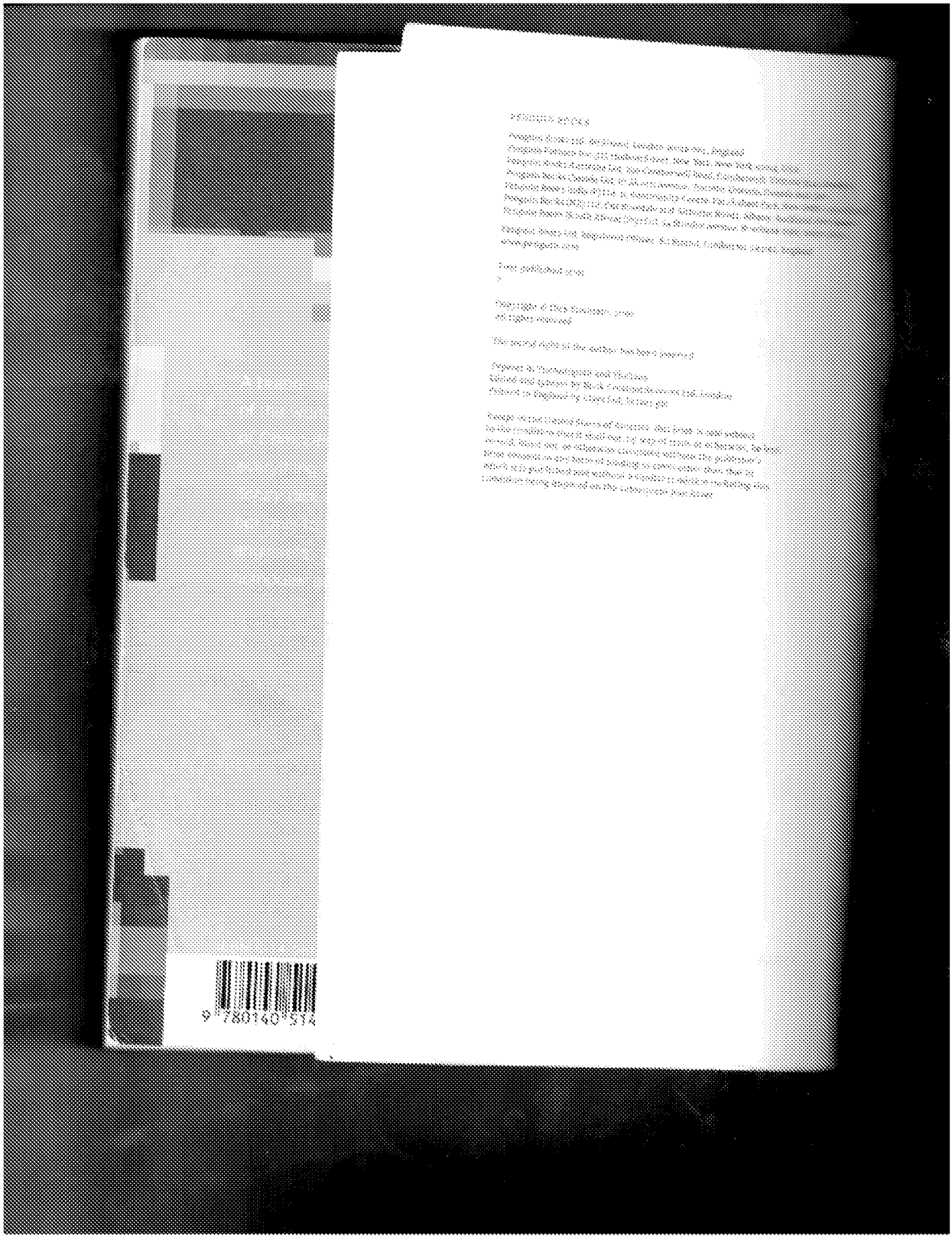
means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism.

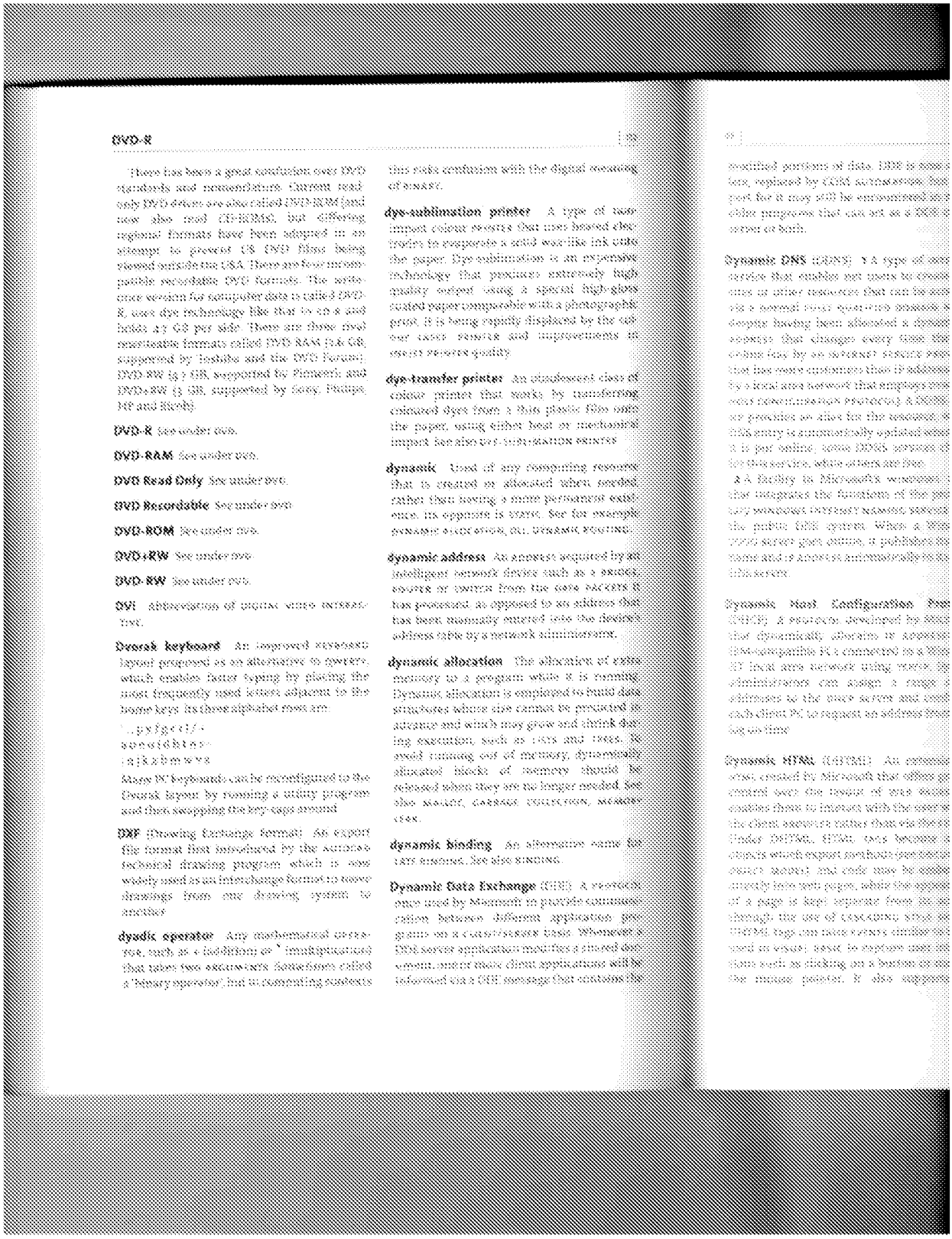
19. The system of claim 17, further comprising means for dynamically establishing a communication path between the devices based in part on the analysis.

EVIDENCE APPENDIX

The following is an excerpt from "Dick Pountain, New Penguin Dictionary of Computing, Penguin Books (2001)." This evidence was entered into record by the Examiner as part of the amendment filed on May 14, 2013.


The New Penguin Dictionary
of Computing
Dick Pountain
PENGUIN BOOKS





DVD-R

There has been a great confusion over DVD standards and nomenclature. Current read-only DVD drives are also called DVD-ROM (and now also read CD-ROMs), but differing regional formats have been adopted in an attempt to prevent US DVD films being viewed outside the USA. There are four incompatible recordable DVD formats. The write-once version for computer data is called DVD-R, uses dye technology like that in CD-R and holds 4.7 GB per side. There are three rival rewriteable formats called DVD-RAM (5.6 GB, supported by Toshiba and the DVD Forum), DVD-RW (4.7 GB, supported by Pioneer) and DVD+RW (3 GB, supported by Sony, Philips, HP and Ricoh).

DVD-R See under DVD.

DVD-RAM See under DVD.

DVD Read Only See under DVD.

DVD Recordable See under DVD.

DVD-ROM See under DVD.

DVD+RW See under DVD.

DVD-RW See under DVD.

DVI Abbreviation of digital video interactive.

Dvorak keyboard An improved keyboard layout proposed as an alternative to QWERTY, which enables faster typing by placing the most frequently used letters adjacent to the home keys (the three alphabet rows are):

. , p y f g c r l /
a o e u i d h t n s -
; q j k x b m w v z

Many PC keyboards can be reconfigured to the Dvorak layout by running a utility program and then swapping the key-caps around.

DXF (Drawing Exchange Format) An export file format first introduced by the Autocad technical drawing program which is now widely used as an interchange format to move drawings from one drawing system to another.

dyadic operator Any mathematical operator, such as + (addition) or * (multiplication) that takes two arguments. Sometimes called a "binary operator", but in computing contexts this risks confusion with the digital meaning of BINARY.

dye-sublimation printer A type of near-impact colour printer that uses heated electrodes to evaporate a solid wax-like ink onto the paper. Dye-sublimation is an expensive technology that produces extremely high quality output using a special high-gloss coated paper comparable with a photographic print. It is being rapidly displaced by the colour laser printer and improvements in inkjet printer quality.

dye-transfer printer An obsolescent class of colour printer that works by transferring coloured dyes from a thin plastic film onto the paper, using either heat or mechanical impact. See also DYE-SUBLIMATION PRINTER.

dynamic Used of any computing resource that is created or allocated when needed, rather than having a more permanent existence. Its opposite is STATIC. See for example DYNAMIC ALLOCATION, DLL, DYNAMIC ROUTING.

dynamic address An address acquired by an intelligent network device such as a BRIDGE, ROUTER or SWITCH from the data PACKETS it has processed, as opposed to an address that has been manually entered into the device's address table by a network administrator.

dynamic allocation The allocation of extra memory to a program while it is running. Dynamic allocation is employed to build data structures whose size cannot be predicted in advance and which may grow and shrink during execution, such as LISTS and TREES. To avoid running out of memory, dynamically allocated blocks of memory should be released when they are no longer needed. See also MALLOC, GARBAGE COLLECTION, MEMORY LEAK.

dynamic binding An alternative name for LATE BINDING. See also BINDING.

Dynamic Data Exchange (DDE) A PROTOCOL once used by Microsoft to provide communication between different application programs on a CLIENT/SERVER basis. Whenever a DDE server application modifies a shared data element, one or more client applications will be informed via a DDE message that contains the modified portions of data. DDE is now a little replaced by COM/ActiveX, but support for it may still be encountered in older programs that can act as a DDE client or server or both.

Dynamic DNS (DDNS) A type of DNS service that enables net users to create sites or other resources that can be accessed via a normal WORLD WIDE WEB browser, despite having been allocated a dynamic IP address that changes every time they connect (via an INTERNET service provider that has more customers than IP addresses) or by a local area network that employs DHCP (DYNAMIC HOST CONFIGURATION PROTOCOL). A DDNS service provides an alias for the user's current IP address. As a DDNS entry is automatically updated whenever it is put online, some DDNS services charge for this service, while others are free.

A facility in Microsoft's WINDOWS 2000 that integrates the functions of the pre-2000 WINDOWS INTERNET NAMING SERVICE (WINS) and the public DNS system. When a Windows 2000 server goes online, it publishes its name and IP address automatically to the DNS server.

Dynamic Host Configuration Protocol (DHCP) A PROTOCOL developed by Microsoft that dynamically allocates IP addresses to TCP/IP-compatible PCs connected to a Windows NT local area network using TCP/IP. The administrator can assign a range of addresses to the DHCP server and configure each client PC to request an address from the server each time it logs on/boots up.

Dynamic HTML (DHTML) An extension of HTML created by Microsoft that offers greater control over the layout of web pages, enables them to interact with the user at the client computer rather than via the server. Under DHTML, HTML tags become full objects which expose methods (procedures) and properties (data) that can be accessed directly from web pages, while the appearance of a page is kept separate from its content through the use of CASCADING STYLE SHEETS. DHTML tags can take events similar to those used in VISUAL BASIC to capture user actions such as clicking on a button or moving the mouse pointer. It also supports

Electronic Acknowledgement Receipt

EFS ID:	18599979
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	21186
Filer:	Maryanne Elizabeth DeAngelo/Jonathan Ferguson
Filer Authorized By:	Maryanne Elizabeth DeAngelo
Attorney Docket Number:	1370.356US1
Receipt Date:	27-MAR-2014
Filing Date:	27-MAY-2008
Time Stamp:	13:51:00
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		1370-356US1_APPEAL-BRIEF_FILED_2014-03-27.pdf	1604336 d91a94cdee080f10dd6056dcbb5058ad17c f3288	yes	24

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Miscellaneous Incoming Letter	1	1
	Appeal Brief Filed	2	24
Warnings:			
Information:			
	Total Files Size (in bytes):	1604336	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Shmuel Shaffer et al.
Title: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Docket No.:	1370.356US1	Serial No.:	12/127,397
Filed:	May 27, 2008	Due Date:	March 27, 2014
Examiner:	Ankur Jain	Group Art Unit:	2649
Customer No.:	21123	Confirmation No.:	8388

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

X Appeal Brief (23 pgs.) responsive to Notice of Non-Compliant Appeal Brief.

If not provided for in a separate paper filed herewith, please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
Customer No.: 21123

By: / Marc Hanish /
Marc S. Hanish
Reg. No. 42,626

Document code: WFEE

United States Patent and Trademark Office
Sales Receipt for Accounting Date: 03/28/2014

CDOWNS SALE #00000001 Mailroom Dt: 03/27/2014 190743 12127397
01 FC : 1251 200.00 DA

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 02/25/2014

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
ART UNIT	PAPER NUMBER

DATE MAILED: 02/25/2014

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Notification of Non-Compliant Appeal Brief (37 CFR 41.37)	Application No.	Applicant(s)	
	12/127,397	Shmuel Shaffer	
	Examiner	Art Unit	
	JAIN, ANKUR	2649	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The Appeal Brief filed on *January 15, 2014* is defective for failure to comply with one or more provisions of 37 CFR 41.37(c).

To avoid dismissal of the appeal, applicant must file an amended brief or other appropriate correction (see MPEP 1205.03) within **ONE MONTH or THIRTY DAYS** from the mailing date of this Notification, whichever is longer. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136.**

1. ☐ The brief does not contain the items required under 37 CFR 41.37(c), or the items are not under the proper heading or in the proper order.

2. ☐ (a) The brief does not contain a concise explanation of the subject matter defined in each of the rejected independent claims, referring to the specification in the Record by page and line number or by paragraph number and to the drawings, if any, by reference characters; and/or (b) the brief fails to identify, for each rejected independent claim and for each dependent claim argued separately that contains a means plus function or step plus function recitation under 35 U.S.C. 112, sixth paragraph, the structure, material, or acts described in the specification as corresponding to each claimed function with reference to the specification in the Record by page and line number or paragraph number, and to the drawings, if any, by reference characters (37 CFR 41.37(c)(1)(iii)).

3. ☒ The brief does not contain a correct copy of the appealed claims as an appendix thereto (37 CFR 41.37(c)(1)(v)).

4. ☒ Other (including any explanation in support of the above items):

Claims Appendix, claim 16 the word "identity" is missing.

cle

Tina Lee,
Supervisory Paralegal
(571) 272-9797

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:	Shmuel Shaffer et al.	Examiner: Ankur Jain
Serial No.:	12/127,397	Group Art Unit: 2649
Filed:	May 27, 2008	Docket No.: 1370.356US1
Customer No.:	21123	Confirmation No.: 8388
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION	

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief- Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The Appeal Brief is presented in response to the Notice of Panel Decision from Pre-Appeal Brief Review mailed on December 18, 2013 and further in support of the Notice of Appeal to the Board of Patent Appeals and Interferences, filed on November 1, 2013, from the Final Rejection of claims 1-7, 10-17, and 19 of the above-identified application, as set forth in the Office Action mailed on July 18, 2013.

The Appellants respectfully request consideration and reversal of the Examiner's rejections of the pending claims. If necessary, please charge any additional fees or credit overpayment to Deposit Account 19-0743.

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

TABLE OF CONTENTS

Page

1. REAL PARTY IN INTEREST 2

2. RELATED APPEALS AND INTERFERENCES 3

3. SUMMARY OF CLAIMED SUBJECT MATTER 4

4. ARGUMENT 8

CLAIMS APPENDIX 17

EVIDENCE APPENDIX 20

1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application is the Assignee, Cisco Technology, Inc., as evidenced by the Assignment from the Inventors recorded on May 27, 2008, at Reel 021003, Frames 0843-0847.

2. RELATED APPEALS AND INTERFERENCES

There are no other Appeals or Interferences known to Appellants that will have a bearing on the Board's decision in the present Appeal.

3. SUMMARY OF CLAIMED SUBJECT MATTER

As illustrated, described and claimed in the present application, aspects of the present inventive subject matter include, but are not limited to, an interoperability system that allows two-way radios to utilize Internet Protocol (IP) networking while still preserving security and talk group features such as talker-id. Specifically, a virtual talk group may have a predefined floor mechanism that would ordinarily prevent an endpoint such as a two-way radio from communicating with it. A system may be provided that dynamically determines whether the endpoint adheres to the predefined floor control mechanism. If so, then the system may simply connect the endpoint to the virtual talk group. If not, however, the system may dynamically insert a proxy that does adhere to the predefined floor control mechanism, allowing the endpoint to connect to the virtual talk group through that dynamically inserted proxy.

INDEPENDENT CLAIM 1

Independent claim 1 describes an apparatus. This apparatus is depicted as reference numeral 102 in FIG. 3 and described in paragraphs [0036]-[0047]. The apparatus includes an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism. This component is depicted as reference numeral 306 in FIG. 3 and paragraph [0040]. The concept of dynamically determining if the endpoint should be connected to the VTG is described in paragraph [0056]. The apparatus also includes a dynamic proxy component that is employed to dynamically insert a proxy that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity. This component is depicted as reference numeral 308 in FIG. 3 and described in paragraph [0046]. The concept of dynamically inserting the proxy is described in the last sentence of paragraphs [0046] ("If another endpoint identifies that the monitored endpoint as non-conforming with the floor control policy of the system, the dynamic proxy component 308 can

dynamically insert a proxy between the endpoint 104 and the VTG") and [0056] ("If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted between the endpoint and the VTG").

DEPENDENT CLAIM 10

Dependent claim 10 further limits the apparatus of claim 1 to indicate that the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG. This is described in paragraph [0035].

INDEPENDENT CLAIM 13

Independent claim 13 describes a method including the act of receiving information associated with an endpoint. This is described in paragraph [0059] and reference numeral 904 of FIG. 9. The method also includes the act of identifying information associated with adherence of the endpoint with a predefined floor control mechanism. This is also described in paragraph [0059] and reference numeral 904 of FIG. 9. The method also includes the act of analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy. This is described in paragraph [0059] and as reference numeral 908 of FIG. 9. The method also includes the act of dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism. This is partially described in paragraph [0059] and as reference numeral 910 of FIG. 9, but also described in more detail in the last sentence of paragraphs [0046] ("If another endpoint identifies that the monitored endpoint as non-conforming with the floor control policy of the system, the dynamic proxy component 308 can dynamically insert a proxy between the endpoint 104 and the VTG") and [0056] ("If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted between the endpoint and the VTG").

INDEPENDENT CLAIM 17

Independent claim 17 describes a system including means for receiving information associated with an endpoint. This is described in paragraph [0059] and reference numeral 904 of FIG. 9. The corresponding structure for this element is the information collection component 302 of the IS 102 of FIG. 3, and more particularly the capability collection component 402 of FIG. 4. The system also includes means for identifying information associated with adherence of the endpoint with a predefined floor control mechanism. This is also described in paragraph [0059] and reference numeral 904 of FIG. 9. The corresponding structure for this element is the information collection component 302 of the IS 102 of FIG. 3, and more particularly the capability collection component 402 of FIG. 4. The system also includes means for analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy. This is described in paragraph [0059] and as reference numeral 908 of FIG. 9. The corresponding structure for this element is the analysis component 306 of FIG. 3. The system also includes means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism. This is partially described in paragraph [0059] and as reference numeral 910 of FIG. 9, but also described in more detail in the last sentence of paragraphs [0046] ("If another endpoint identifies that the monitored endpoint as non-conforming with the floor control policy of the system, the dynamic proxy component 308 can dynamically insert a proxy between the endpoint 104 and the VTG") and [0056] ("If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted between the endpoint and the VTG"). The corresponding structure for this element is the dynamic proxy component 308 of FIG. 3.

This *Summary of Claimed Subject Matter* is provided with citations to specific locations in the specification and figures of the present application. Due to the specificity of these citations, as should be readily understood, full understanding of the subject matter of the citations may require the context of the surrounding paragraphs and figure elements. Further, this summary does not provide an exhaustive or exclusive view of the present subject matter, and

Appellants refer to each of the claims and its legal equivalents for a complete statement of the invention.

4. ARGUMENT

The Rejection of Claims Under § 103

Claims 1-3, 7, 10-17, and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaffer et al. (U.S. Publication No. 2007/0105579 A1; hereafter "Shaffer"), in view of Shell et al. (U.S. Publication No. 2004/0224668 A1; hereafter "Shell"), and further in view of Parkkinen et al. (U.S. Publication No. 2011/0004636; hereafter "Park").

Claims 4-6 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaffer in view of Shell and Park, as applied to Claims 1 and 4-5, and further in view of Grealish et al. (U.S. Publication No. 2009/0093235 A1; hereafter "Grealish").

Independent claims 1, 7, and 17

Claim 1 includes the following element:

a dynamic proxy component that is employed to ***dynamically insert a proxy*** that adheres to the predefined floor control mechanism ***when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism***, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity. (emphasis added)

Claim 7 includes the following element:

dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism. (emphasis added)

Claim 17 includes the following element:

means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism. (emphasis added)

The main disagreement in this case appears to be the meaning of these elements, and specifically the meaning of ***dynamically inserting a proxy***.

The cited prior art teaches systems where the proxy is always present, at least as far back as when the system was first set up. At a certain time, the system decides to access this proxy, but the proxy is always present. Appellants respectfully assert that this is what is known in the art as a "static" proxy, because it is always present. Notably, this static proxy is also present before the system has been run (i.e., prior to execution).

The Examiner is asserting that the use of this type of static proxy falls under the meaning of dynamically inserting a proxy. This reflects the primary disagreement for decision on appeal, as it appears evident that if this type of static proxy does not fall under the meaning of dynamically inserting a proxy, the prior art would have failed to show an element in each of the independent claims and thus those claims would be allowable. This disagreement can be broken up into two parts: (1) the meaning of "dynamic" and (2) whether "inserting a proxy" is equivalent to "employing a proxy."

(1) The meaning of "dynamic"

As the Examiner correctly points out, MPEP 2111 lays out the various tests used in determining the meaning of a claim term. The Examiner also correctly points out that this section allows the patentee to act as his own lexicographer as long as the intent is express in the written description. Appellants agree with this portion of the Examiner's analysis and also agree that, in this case, the patentee has not acted as his own lexicographer with respect to the term "dynamic" relative to "inserting a proxy". The Specification simply assumes that the plain and ordinary meaning of the term "dynamically" as it is used in the computer science arts would be understood, and uses the term throughout the specification in a manner consistent with that definition.

Where the disagreement lies is how the Examiner is interpreting the plain and ordinary meaning of "dynamically."

The Examiner, even after repeated attempts on the part of the Appellants, has failed to produce any definition of the term "dynamically." The Examiner appears to be under the mistaken impression that, because the term is not explicitly defined in the Specification, the term can be interpreted however the Examiner wants, or at least interpreted so broadly that it has no

meaning.[1] It is, of course, difficult to debate the meaning of a claim term when the Examiner provides no proposed definition for the term. At the very least, however, it would appear that the Examiner feels that the term "dynamically inserting a proxy" would cover the "use" of a "static proxy."

Perhaps most tellingly, the Examiner cites several portions of the MPEP to support his interpretation of the term "dynamically", yet these portions are selectively cited and lack a key element of the analysis required to interpret a claim. Appellants respectfully submit that if, in this case, a claim term is not explicitly defined in the Specification, it should be afforded its plain meaning to one of ordinary skill in the art at the time of the invention. This is stated as such in MPEP 2111.01 ("Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification. The plain meaning of a term means the ordinary and customary meaning **given to the term by those of ordinary skill in the art at the time of the invention.**").

Nowhere in the Office Action does the Examiner acknowledge his responsibility to factor in what those of ordinary skill in the art would believe at the time of the invention, and indeed the analysis provided lacks any evidence showing the meaning to those of ordinary skill in the art.

In contrast, Appellants have provided multiple arguments and evidence as to the meaning of the term "dynamic" to one of ordinary skill in the art, yet the Examiner has failed to address or even acknowledge this evidence. Specifically, Appellants have provided a definition from a computer dictionary clearly indicating the meaning of the term "dynamic" as being such that a "static proxy" would not qualify. Specifically, this definition states that "dynamic" is "used of any computing resource that is created or allocated when needed, rather than having a more permanent existence."[2]

This definition is also consistent with the Specification. While no explicit definition of "dynamic" is used in the Specification, paragraph [0026] states: "[t]he subject disclosure relates generally to communication networks and in particular to an interoperability system that **facilitates a dynamic insertion of a media proxy based on capability negotiation.**" Since the

[1] See Final Office Action, page 4 ("However, the Examiner would like to note that there is no definition of 'dynamically' in the specification to mean what Appellant is now arguing this claimed feature to mean. Thus, Appellant's argument is moot and must be withdrawn.").
[2] Dick Pountain, New Penguin Dictionary of Computing, Penguin Books (2001).

insertion of a media proxy is based on capability negotiation, which does not take place until the system is up and running (and negotiating the capabilities), then the dynamic insertion of the media proxy must mean that it was inserted when needed (and not before).

This definition is also consistent with the claims. Claim 13 states "dynamically inserting a proxy between the endpoint and the VTG ***when the endpoint is identified as non-conforming with the floor control mechanism***." Again, since the endpoint is not identified as non-conforming until the system is up and running (and performing such identification), then the dynamic insertion of the proxy must mean that it was inserted when needed (and not before).

The Examiner's definition is not based on what one of ordinary skill in the art would understand at the time of the invention, and is also inconsistent with the provided dictionary definition, as well as the Specification and claims. A static proxy could not possibly be inserted based on capability negotiation, because a static proxy would have to be in existence in the system before such capability negotiation could take place. The Examiner's interpretation also, as the Examiner freely admitted in an Interview conducted on October 22, 2013, renders the term "dynamically" meaningless, which is contrary to settled law.[3]

For these reasons, Appellants respectfully request that Appellants' proffered definition of "dynamic" is correct.

(2) Whether "inserting a proxy" is equivalent to "employing a proxy."

The Examiner also makes the rather confusing argument that somehow "inserting a proxy" is equivalent to "employing a proxy." Appellants do not fully understand how the Examiner can make this assertion, as the plain meaning of inserting is different than employing, both to one of ordinary skill in the computer arts at the time of the invention and to one of skill in any art. Inserting involves an act of placing something somewhere where it wasn't previously present, while employing involves using that something in some way. Indeed, if anything, "employ" appears to be a broader term, as it can be used whether or not the "something" in question was ever inserted.

[3] Cat Tech LLC v. Tube-Master, Inc., 528 F.3d 871, 885 (Fed. Cir. 2008) (refusing to adopt a claim construction that would render a claim limitation meaningless)."

The Examiner attempts to cite to statements made by Appellants in a previous response and to places in the Specification as evidence for an assertion that somehow "inserting a proxy" is equivalent to "employing a proxy." It is important to keep in mind that the Examiner is now attempting to argue that the claim language is in fact **broader** than the plain meaning to one of ordinary skill in the art. Thus, it is not the Appellants attempting to be their own lexicographer by attempting to use statements in the Specification, but the Examiner attempting to force the Appellants to be their own lexicographer based on a statement made in a response during prosecution, the statement having nothing to do with the scope of the claims but rather merely providing support for an amendment. Nevertheless, the standard for being one's own lexicographer is the same: Under MPEP 2111, unless the patentee rebuts the presumption by "clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s)", the term must be afforded its ordinary and customary meaning. Not only does the Examiner fail to meet this burden, as will be shown, the argument the Examiner is utilizing makes no sense to begin with.

The Examiner bases his argument on a statement made by Appellants on Page 1 of the Remarks of the Response filed January 4, 2013. In that response, Appellants had added the term "insert" in front of the term "proxy", and also added "that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism" after the term "proxy". Appellants then pointed to paragraph [0056] as support for this amendment. The Examiner appears to utilize this as some sort of "admission" that the phrase "inserting a proxy" means "employing a proxy". Appellants respectfully disagree. Not only was this not Appellants' intent with the statement, even if one could argue that such a statement may have implied equivalency, it would clearly not meet the standard of clearly disavowing the plain meaning of a claim term as required by MPEP 2111.

The Examiner may be confused by the fact that, in FIG. 7, step 714 states "employ dynamic proxy" and the Appellants did state that "[t]he paragraph ([0056]) also goes on to describe how the proxy is dynamically inserted at 714." The Examiner may be assuming this means that employing a dynamic proxy is the same as dynamically inserting it. However, this misconstrues paragraph [0034]. Paragraph [0034] actually describes multiple different

embodiments, and the support for the amendment is found in a different embodiment than the Examiner apparently is relying upon. Paragraph [0034] states, with regard to step 714:

> At 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG. In one embodiment, if the endpoint is admitted into a VTG without proper credentials, it can be monitored for its adherence with a floor control policy, such as a specified rule of transmission. **If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted** between the endpoint and the VTG.

Thus, while this paragraph does describe the potentially broader embodiment of "employing a dynamic proxy", it also describes a narrower embodiment where a proxy is dynamically inserted if it is identified that the monitored endpoint is non-conforming. **It is this narrower embodiment that is claimed, and was being pointed to by Appellants in the response**. Indeed, Appellants are confused as to why the Examiner feels the need to try and force the Appellant into the "can be employed" language from one embodiment while "dynamically inserting" is recited nearly verbatim in the other embodiment.

The result of all this, of course, is that the prior art still does not teach or suggest the claims. Specifically, Shaffer discloses a proxy media service (PMS), but this service is present all the time, and handles communication with both endpoints in adherence with the floor control mechanism (full duplex) and endpoints not in adherence (half duplex). This is depicted as PMS 220 in FIG. 5, reproduced below.

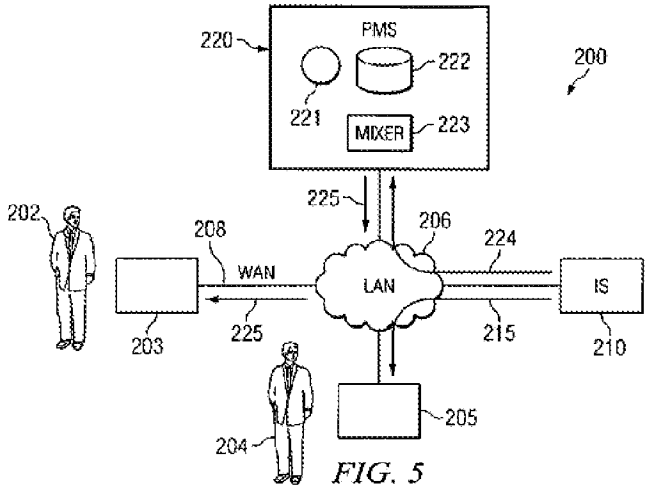


FIG. 5

There is nothing dynamic about the use of this proxy; it is simply used all the time. Furthermore, this proxy is not inserted dynamically at all, let alone "when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism."

Shell discloses a generic proxy server, but again there is nothing suggesting that this proxy server is dynamically inserted, as opposed to simply always being present, let alone specifically being dynamically inserted when an endpoint is determined to not be in adherence with a floor control mechanism. Instead, the proxy server in Shell is simply always present and is used or not used depending upon whether or not a particular connection requires it. This is indeed implied in paragraph [0090], which states "[f]or example, if the most appropriate connection method is determined to be through a proxy server, proxy 225 may cause a connection to be established to ***the*** proxy server." (emphasis added). Note that this sentence says "the" proxy server, implying that the proxy server already exists in the system, at least at the time this determination is made.

As such, independent claims 1, 13, and 17 are in condition for allowance.

Dependent claim 10

Claim 10, being dependent upon allowable parent claims, are also in condition for allowance for the same reasons as described above with respect to the independent claim. Furthermore, Appellants respectfully disagree with the Examiner's analysis of claim 10. The Examiner argues that paragraph [0065] of Shaffer teaches that "the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG".

The Examiner argues that the claimed limitation "reads on the priority of the VTG being changed based on an event associated with the VTG." First of all, the priority of the VTG in Shaffer is not changed. Rather, this paragraph describes how a maximum talk time for a user connected in a VTG can vary based on the priority of an event associated with the VTG. While "priority" is a parameter in the system as a whole, it is not a parameter of the VTG, but is rather a parameter of a call or session. Nevertheless, changing the priority does not "conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" as set forth in claim 10. Notably, this argument was presented in the last response by the Appellants, but the Examiner failed to address this argument in the Final Office Action, merely stating that the Examiner "firmly submits" that this element is contained in Shaffer.

Dependent claims 2-7, 11-12, 14-16, and 19

These claims are not argued separately in this appeal and will rise and fall with the independent claims from which they depend.

SUMMARY

It is respectfully submitted that the art cited does not render the claims unpatentable. Reversal of the rejections and allowance of the pending claims are respectfully requested.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(408) 278-4056

Date 1/15/14 By /Marc Hanish/

Marc S. Hanish
Reg. No. 42,626

CLAIMS APPENDIX

1. An apparatus, comprising:

an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism; and

a dynamic proxy component that is employed to dynamically insert a proxy that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity.

2. The apparatus of claim 1, wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams.

3. The apparatus of claim 1, further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization.

4. The apparatus of claim 1, further comprising an identity collection component that receives an identity of the endpoint to assess a security risk associated with the endpoint.

5. The apparatus of claim 4 wherein the identity collection component employs credentials resident on the endpoint.

6. The apparatus of claim 5, wherein the security risk associated with the endpoint is that the endpoint transmits into a given VTG without adhering with the floor control policy of the system.

7. The apparatus of claim 1, further comprising an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis.

10. The apparatus of claim 1 wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG.

11. The apparatus of claim 1, wherein the dynamic proxy component dynamically establishes a communication path between the endpoint and one or more disparate endpoints based in part on the analysis.

12. The apparatus of claim 1, further comprising a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG.

13. A method, comprising:

receiving information associated with an endpoint;

identifying information associated with adherence of the endpoint with a predefined floor control mechanism;

analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism.

14. The method of claim 13, further comprising identifying at least one of media capability information or identity information associated with the endpoint.

15. The method of claim 13, further comprising identifying the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

16. The method of claim 15, wherein an entity is conforming with the floor control mechanism if it adheres to predefined quality of service, rules of transmission, and trusted endpoint.

17. A system, comprising:

means for receiving information associated with an endpoint;

means for identifying information associated with adherence of the endpoint with a predefined floor control mechanism;

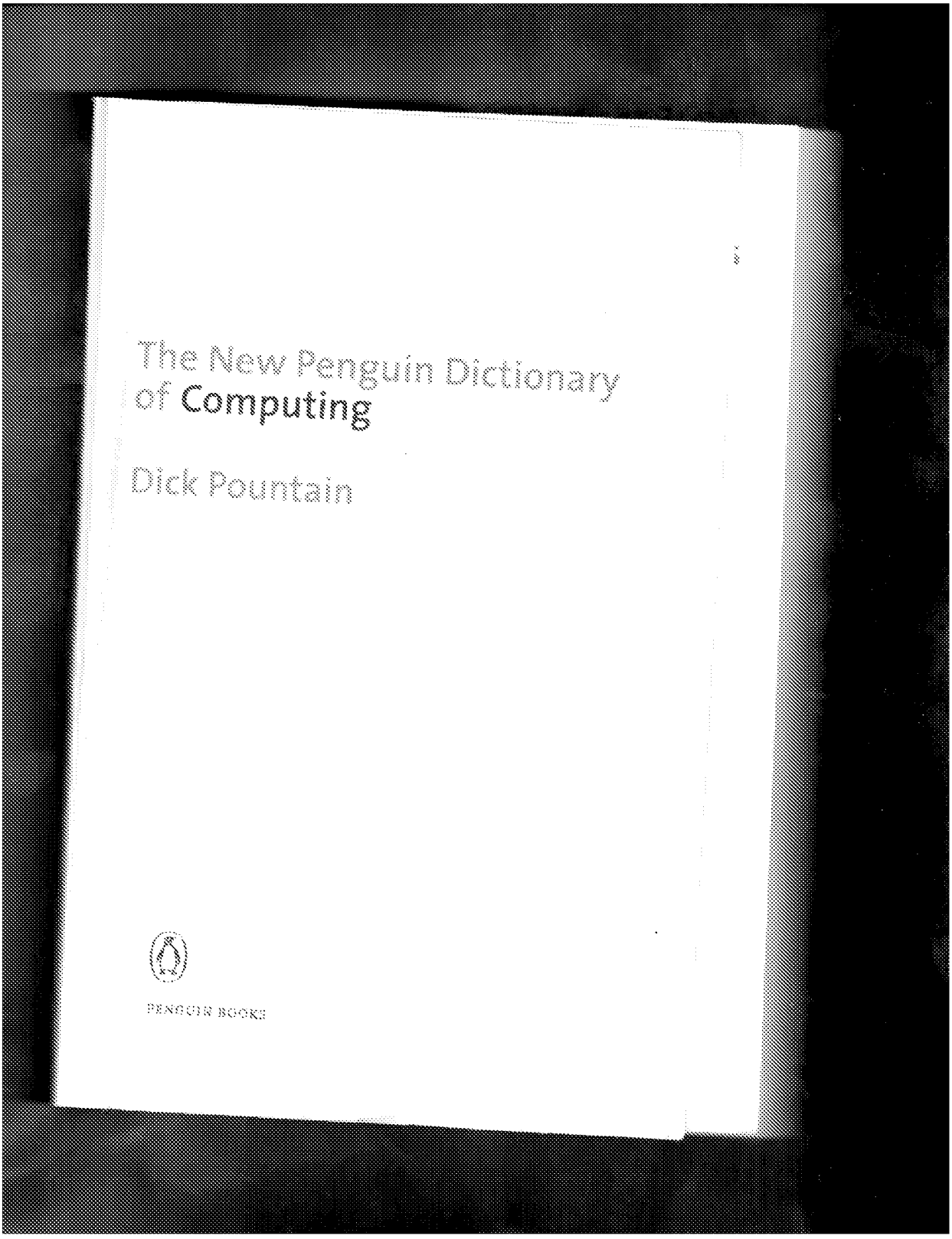
means for analyzing the identified information to evaluate if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

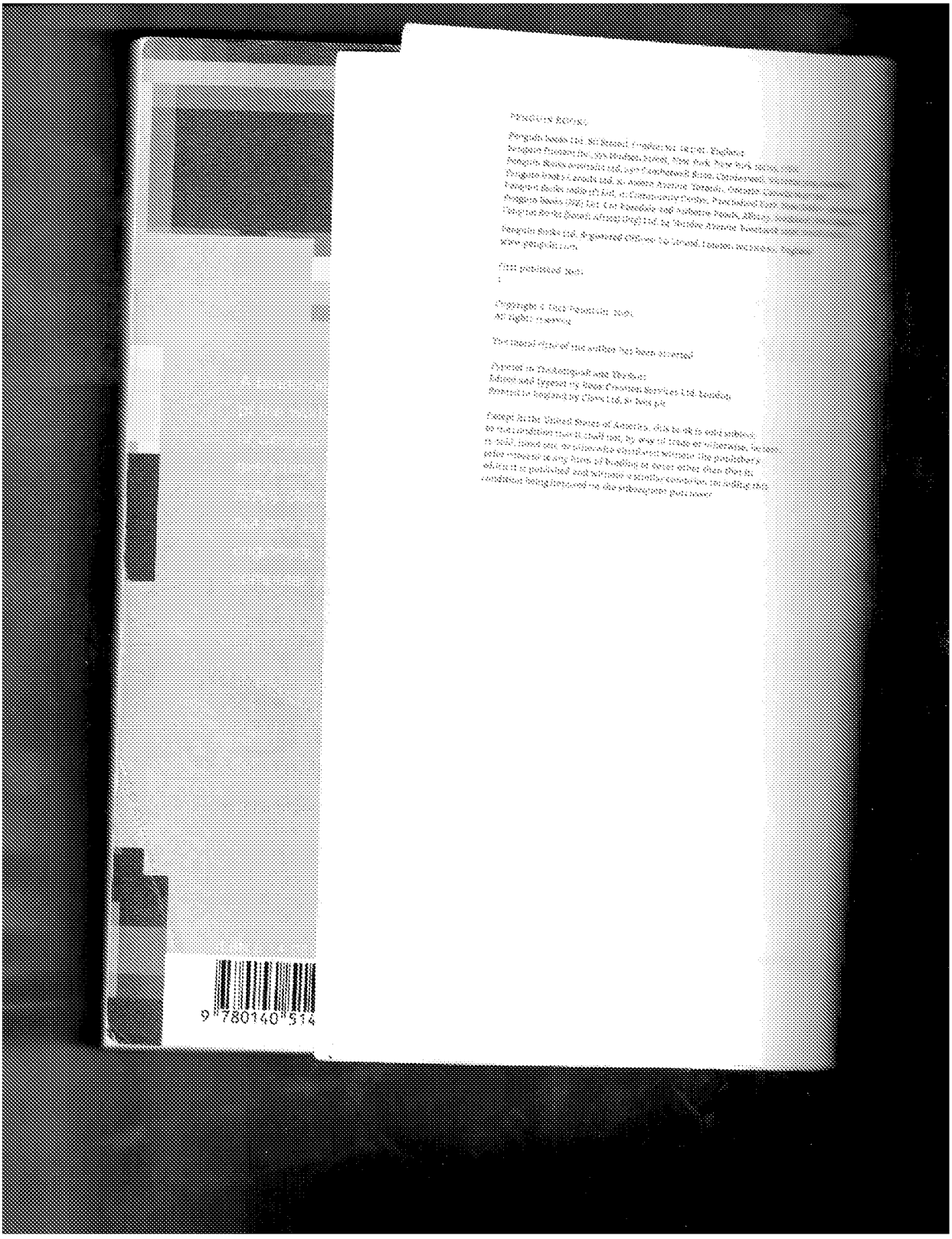
means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism.

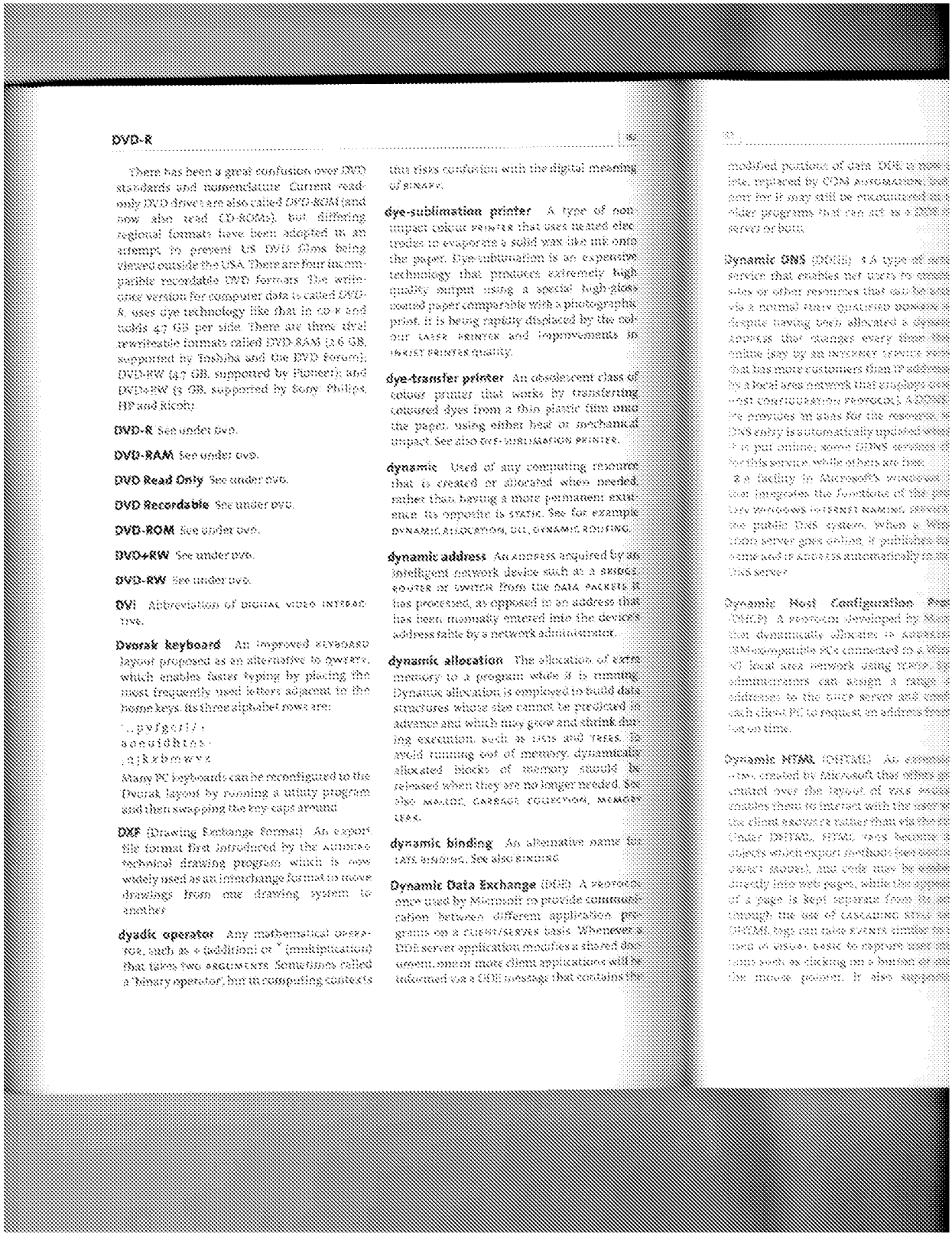
19. The system of claim 17, further comprising means for dynamically establishing a communication path between the devices based in part on the analysis.

EVIDENCE APPENDIX

The following is an excerpt from "Dick Pountain, New Penguin Dictionary of Computing, Penguin Books (2001)." This evidence was entered into record by the Examiner as part of the amendment filed on May 14, 2013.


The New Penguin Dictionary
of Computing
Dick Pountain
PENGUIN BOOKS


9 780140 514



DVD-R

There has been a great confusion over DVD standards and nomenclature. Current read-only DVD drives are also called *DVD-ROM* (and now also read CD-ROMs), but differing regional formats have been adopted in an attempt to prevent US DVD films being viewed outside the USA. There are four incompatible recordable DVD formats. The write-once version for computer data is called *DVD-R*, uses dye technology like that in CD-R and holds 4.7 GB per side. There are three rival rewriteable formats called DVD-RAM (2.6 GB, supported by Toshiba and the DVD forum), DVD-RW (4.7 GB, supported by Pioneer), and DVD+RW (3 GB, supported by Sony, Philips, HP and Ricoh).

DVD-R See under DVD.

DVD-RAM See under DVD.

DVD Read Only See under DVD.

DVD Recordable See under DVD.

DVD-ROM See under DVD.

DVD+RW See under DVD.

DVD-RW See under DVD.

DVI Abbreviation of DIGITAL VIDEO INTERACTIVE.

Dvorak keyboard An improved KEYBOARD layout proposed as an alternative to QWERTY, which enables faster typing by placing the most frequently used letters adjacent to the home keys. Its three alphabet rows are:

```
' , p y f g c r l / =
a o e u i d h t n s -
; q j k x b m w v z
```

Many PC keyboards can be reconfigured to the Dvorak layout by running a utility program and then swapping the key caps around.

DXF (Drawing Exchange Format) An export file format first introduced by the AUTOCAD technical drawing program which is now widely used as an interchange format to move drawings from one drawing system to another.

dyadic operator Any mathematical OPERATOR, such as + (addition) or * (multiplication) that takes two ARGUMENTS. Sometimes called a 'binary operator', but in computing contexts this risks confusion with the digital meaning of BINARY.

dye-sublimation printer A type of non-impact colour PRINTER that uses heated electrodes to evaporate a solid wax-like ink onto the paper. Dye-sublimation is an expensive technology that produces extremely high quality output using a special high-gloss coated paper comparable with a photographic print. It is being rapidly displaced by the COLOUR LASER PRINTER and improvements in INKJET PRINTER quality.

dye-transfer printer An obsolescent class of colour printer that works by transferring coloured dyes from a thin plastic film onto the paper, using either heat or mechanical impact. See also DYE-SUBLIMATION PRINTER.

dynamic Used of any computing resource that is created or allocated when needed, rather than having a more permanent existence. Its opposite is STATIC. See for example DYNAMIC ALLOCATION, DLL, DYNAMIC ROUTING.

dynamic address An ADDRESS acquired by an intelligent network device such as a BRIDGE, ROUTER or SWITCH from the DATA PACKETS it has processed, as opposed to an address that has been manually entered into the device's address table by a network administrator.

dynamic allocation The allocation of extra memory to a program while it is running. Dynamic allocation is employed to build data structures whose size cannot be predicted in advance and which may grow and shrink during execution, such as LISTS and TREES. To avoid running out of memory, dynamically allocated blocks of memory should be released when they are no longer needed. See also MALLOC, GARBAGE COLLECTION, MEMORY LEAK.

dynamic binding An alternative name for LATE BINDING. See also BINDING.

Dynamic Data Exchange (DDE) A PROTOCOL once used by Microsoft to provide communication between different application programs on a CLIENT/SERVER basis. Whenever a DDE server application modifies a shared document, one or more client applications will be informed via a DDE message that contains the modified portions of data. DDE is now a little, replaced by COM automation, but some of it may still be encountered in older programs that can act as a DDE client or server or both.

Dynamic DNS (DDNS) A type of NAME SERVICE that enables net users to connect to sites or other resources that can be accessed via a normal name (purchased domain or domain having been allocated a dynamic IP ADDRESS that changes every time the computer (or by an INTERNET SERVICE PROVIDER that has more customers than IP addresses) on a local area network that employs DHCP (DYNAMIC HOST CONFIGURATION PROTOCOL). A DDNS service provides an alias for the resource, so that DNS entry is automatically updated when the computer is put online. Some DDNS services charge for this service while others are free.

DDNS facility in Microsoft's WINDOWS 2000 SERVER that integrates the functions of the good old WINDOWS INTERNET NAMING SERVICE and the public DNS system. When a Windows 2000 server goes online, it publishes its own name and IP address automatically to the DNS server.

Dynamic Host Configuration Protocol (DHCP) A PROTOCOL developed by Microsoft that dynamically allocates IP ADDRESSES to TCP/IP-compatible PCs connected to a Windows NT local area network using TCP/IP. The network administrators can assign a range of IP addresses to the DHCP server and then configure each client PC to request an address from the server at boot time.

Dynamic HTML (DHTML) An extension of HTML created by Microsoft that offers programmers control over the layout of WEB PAGES and enables them to interact with the user on the client computer rather than via the server. Under DHTML, HTML tags become OBJECTS with exposed properties, methods (see OBJECT MODEL), and code may be embedded directly into web pages, while the appearance of a page is kept separate from its content through the use of CASCADING STYLE SHEETS. DHTML tags can raise EVENTS similar to those in VISUAL BASIC to capture user actions such as clicking on a button or moving the mouse pointer. It also supports

Electronic Acknowledgement Receipt

EFS ID:	17920638
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	21186
Filer:	Thomas F. Brennan/Emily Clapp
Filer Authorized By:	Thomas F. Brennan
Attorney Docket Number:	1370.356US1
Receipt Date:	15-JAN-2014
Filing Date:	27-MAY-2008
Time Stamp:	15:02:31
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		1370356US1AppealBrief.pdf	3208414 93fd8df51c541cc8f6cb13eddeea20995c50eafb	yes	25

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Transmittal Letter	1	1
	Appeal Brief Filed	2	25
Warnings:			
Information:			
	Total Files Size (in bytes):	3208414	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Shmuel Shaffer et al.

Title: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Docket No.:	1370.356US1	Serial No.:	12/127,397
Filed:	May 27, 2008	Due Date:	January 18, 2014
Examiner:	Ankur Jain	Group Art Unit:	2649
Customer No.:	21123	Confirmation No.:	8388

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

X Appeal Brief (24 pgs.)

If not provided for in a separate paper filed herewith, please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
Customer No.: 21123

By: / Marc Hanish /
Marc S. Hanish
Reg. No. 42,626

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 12/18/2013

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	
ART UNIT	PAPER NUMBER
2649	
MAIL DATE	DELIVERY MODE
12/18/2013	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Panel Decision from Pre-Appeal Brief Review	Application No. 12/127,397	Applicant(s) SHAFFER ET AL.
	Examiner YUWEN PAN	Art Unit 2649

This is in response to the Pre-Appeal Brief Request for Review filed 01 November, 2013.

1. ☐ **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

☐ The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
☐ The request does not include reasons why a review is appropriate.
☐ A proposed amendment is included with the Pre-Appeal Brief request.
☐ Other: .

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2. ☒ **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

☒ The panel has determined the status of the claim(s) is as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: *1-7, 10-17, and 19*.
Claim(s) withdrawn from consideration: _____.

3. ☐ **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4. ☐ **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.

All participants:

(1) *YUWEN PAN*.	(3) *TEMESGHEN GHEBRETINSAE*.
(2) *Jain Ankur*.	(4)_____.

/ANKUR JAIN/ Examiner, Art Unit 2649	/YUWEN PAN/ Supervisory Patent Examiner, Art Unit 2649	/TEMESGHEN GHEBRETINSAE/ Supervisory Patent Examiner, Art Unit 2648

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Shmuel Shaffer et al.	Examiner: Ankur Jain
Serial No.:	12/127,397	Group Art Unit: 2649
Filed:	May 27, 2008	Docket: 1370.356US1
Customer No.	21123	Confirmation No.: 8388
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION	

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Applicants request review of the final rejection in the above-identified application in the Final Action mailed July 18, 2013. No amendments are being filed with this request. This request is being filed with a Notice of Appeal. The review is requested for the reasons stated below:

The claims stand rejected under various combinations of Shaffer et al. (U.S. Publication No. 2007/0105579 A1; hereafter referred to as "Shaffer"), Shell et al. (U.S. Publication No. 2004/0224668 A1; hereafter referred to as "Shell"), Parkkinen et al. (U.S. Publication No. 2011/0004636 A1; hereafter referred to as "Parkkinen"), and Grealish et al. (U.S. Publication No. 2009/0093235 A1; hereafter referred to as "Grealish").

Claim 1 includes the following element:

a dynamic proxy component that is employed to ***dynamically insert a proxy*** that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity.

Claim 7 includes the following element:

dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism.

Claim 17 includes the following element:

means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism.

The main disagreement in this case appears to be the meaning of these elements, and specifically the meaning of ***dynamically inserting a proxy***.

The cited prior art teaches systems where the proxy is always present. At a certain time, the systems decide to access this proxy., but the proxy is always present. Applicants respectfully assert that this is what is known in the art as a "static" proxy, because it is always present.

The Examiner is asserting that the use of this type of static proxy still falls under the meaning of dynamically inserting a proxy. This reflects the primary disagreement for decision on appeal, as it appears evident that if this type of static proxy does not fall under the meaning of dynamically inserting a

proxy, the prior art would have failed to show an element in each of the independent claims and thus those claims would be allowable. This disagreement can be broken up into two parts: (1) the meaning of "dynamic" and (2) whether "inserting a proxy" is equivalent to "employing a proxy."

(1) The meaning of "dynamic"

As the Examiner correctly points out, MPEP 2111 lays out the various tests used in determining the meaning of a claim term. The Examiner also correctly points out that this section allows the patentee to act as his own lexicographer as long as the intent is express in the written description. Applicants agree with this portion of the Examiner's analysis and also agrees that, in this case, the patentee has not acted as his own lexicographer with respect to the term "dynamic" relative to "inserting a proxy". The Specification simply assumes that the plain and ordinary meaning of the term "dynamically" as it is used in the computer science arts would be understood, and uses the term throughout the specification in a manner consistent with that definition.

Where the disagreement lies is how the Examiner is interpreting the plain and ordinary meaning of "dynamically."

The Examiner, even after repeated attempts on the part of the Applicants, has failed to produce any definition of the term "dynamically." The Examiner appears to be under the mistaken impression that, because the term is not explicitly defined in the Specification, the term can be interpreted however the Examiner wants, or at least interpreted so broadly that it has no meaning.[1] It is, of course, difficult to debate the meaning of a claim term when the Examiner provides no proposed definition for the term. At the very least, however, it would appear that the Examiner feels that the term "dynamically inserting a proxy" is equivalent to "using a static proxy."

Perhaps most tellingly, the Examiner cites several portions of the MPEP to support his interpretation of the term "dynamically", yet these portions are selectively cited and lack a key element of the analysis required to interpret a claim. Applicants respectfully submit that if, in this case, a claim term is not explicitly defined in the Specification, it should be afforded its plain meaning to one of ordinary skill in the art at the time of the invention. This is stated as such in MPEP 2111.01 ("Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification. The plain meaning of a term means the ordinary and customary meaning **given to the term by those of ordinary skill in the art at the time of the invention.**").

Nowhere in the Office Action does the Examiner acknowledge his responsibility to factor in what those of ordinary skill in the art would believe at the time of the invention, and indeed the analysis provided lacks any evidence showing the meaning to those of ordinary skill in the art.

In contrast, Applicants have provided multiple arguments and evidence as to the meaning of the term "dynamic" to one of ordinary skill in the art, yet the Examiner has failed to address or even acknowledge this evidence. Specifically, Applicants have provided a definition from a computer dictionary clearly indicating the meaning of the term "dynamic" as being such that a "static proxy" would not qualify. Specifically, this definition states that "dynamic" is "used of any computing resource that is created or allocated when needed, rather than having a more permanent existence."[2]

This definition is also consistent with the Specification. While no explicit definition of "dynamic" is used in the Specification, paragraph [0026] states: "[t]he subject disclosure relates generally to communication networks and in particular to an interoperability system that **facilitates a dynamic insertion of a media proxy based on capability negotiation.**" Since the insertion of a media proxy is based on capability negotiation, which does not take place until the system is up and running (and

[1] See Final Office Action, page 4 ("However, the Examiner would like to note that there is no definition of 'dynamically' in the specification to mean what Applicant is now arguing this claimed feature to mean. Thus, Applicant's argument is moot and must be withdrawn.").
[2] Dick Pountain, New Penguin Dictionary of Computing, Penguin Books (2001).

negotiating the capabilities), then the dynamic insertion of the media proxy must mean that it was inserted when needed (and not before).

This definition is also consistent with the claims. Claim 13 states "dynamically inserting a proxy between the endpoint and the VTG ***when the endpoint is identified as non-conforming with the floor control mechanism***." Again, since the endpoint is not identified as non-conforming until the system is up and running (and performing such identification), then the dynamic insertion of the proxy must mean that it was inserted when needed (and not before).

The Examiner's definition is not based on what one of ordinary skill in the art would understand at the time of the invention, but is also inconsistent with the provided dictionary definition, as well as the Specification and claims. A static proxy could not possibly be inserted based on capability negotiation, because a static proxy would have to be in existence in the system before such capability negotiation could take place. The Examiner's interpretation also, as the Examiner freely admitted in an Interview conducted on October 22, 2013, renders the term "dynamically" meaningless, which is contrary to settled law.[3]

For these reasons, Applicants respectfully request that Applicants' proffered definition of "dynamic" is correct.

Whether "inserting a proxy" is equivalent to "employing a proxy."

The Examiner also makes the rather confusing argument that somehow "inserting a proxy" is equivalent to "employing a proxy." Applicants do not fully understand how the Examiner can make this assertion, as the plain meaning of inserting is different than employing, both to one of ordinary skill in the computer arts at the time of the invention and to one of skill in any art. Inserting involves an act of placing something somewhere where it wasn't previously present, while employing involves using that something in some way. Indeed, if anything, "employ" appears to be a broader term, as it can be used whether or not the "something" in question was ever inserted.

The Examiner attempts to cite to statements made by Applicants in a previous response and to places in the Specification as evidence for an assertion that somehow "inserting a proxy" is equivalent to "employing a proxy." It is important to keep in mind that the Examiner is now attempting to argue that the claim language is in fact **broader** than the plain meaning to one of ordinary skill in the art. Thus, it is not the Applicants attempting to be their own lexicographer by attempting to use statements in the Specification, but the Examiner attempting to force the Applicants to be their own lexicographer. Nevertheless, the standard is the same: Under MPEP 2111, unless the patentee rebuts the presumption by "clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s)", the term must be afforded its ordinary and customary meaning. Not only does the Examiner fail to meet this burden, as will be shown the argument the Examiner is utilizing makes no sense to begin with.

The Examiner bases his argument on a statement made by Applicants on Page 1 of the Remarks of the Response filed January 4, 2013. In that response, Applicants had added the term "insert" in front of proxy and also added "that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism" after the term "proxy". Applicants then pointed to paragraph [0056] as support for this amendment. The Examiner appears to utilize this as some sort of "admission" that the phrase "inserting a proxy" means "employing a proxy". Applicants respectfully disagree. Not only was this not Applicants' intent with the statement, even if one could argue that such a statement may have implied equivalency, it would clearly not meet the standard of clearly disavowing the plain meaning of a claim term as required by MPEP 2111.

[3] Cat Tech LLC v. Tube-Master, Inc., 528 F.3d 871, 885 (Fed. Cir. 2008) (refusing to adopt a claim construction that would render a claim limitation meaningless)."

The Examiner may be confused by the fact that, in FIG. 7, step 714 states "employ dynamic proxy" and the Applicants did state that "[t]he paragraph ([0056]) also goes on to describe how the proxy is dynamically inserted at 714." The Examiner may be assuming this means that employing a dynamic proxy is the same as dynamically inserting it. However, paragraph [0034] states, with regard to step 714:

> At 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG. In one embodiment, if the endpoint is admitted into a VTG without proper credentials, it can be monitored for its adherence with a floor control policy, such as a specified rule of transmission. **If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted** between the endpoint and the VTG.

Thus, while this paragraph does describe the potentially broader embodiment of "employing a dynamic proxy", it also describes a narrower embodiment where a proxy is dynamically inserted if it is identified that the monitored endpoint is non-conforming. **It is this narrower embodiment that is claimed, and was being pointed to by Applicants in the response**. Indeed, Applicants are confused as to why the Examiner feels the need to try and stretch the meaning of the term "dynamically inserting" when that same exact language is used nearly verbatim in the specification.

The result of all this, of course, is that the prior art still does not teach or suggest the claims. Specifically, Shaffer discloses a proxy media service (PMS), but this is present all the time, and handles communication with both endpoints in adherence with the floor control mechanism (full duplex) and endpoints not in adherence (half duplex). This is depicted as PMS 220 in FIG. 5, reproduced below.

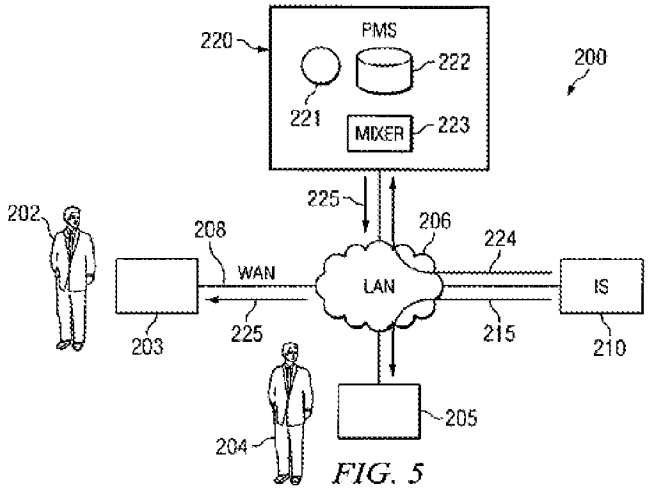


FIG. 5

There is nothing dynamic about the use of this proxy; it is simply used all the time.

Shell discloses a generic proxy server, but again there is nothing suggesting that this proxy server is dynamically inserted, as opposed to simply always being present, let alone specifically being dynamically inserted when an endpoint is determined to not be in adherence with a floor control mechanism. Instead, the proxy server in Shell is simply always present and is used or not used depending upon whether or not a particular connection requires it. This is indeed implied in paragraph [0090], which states "[f]or example, if the most appropriate connection method is determined to be through a proxy server, proxy 225 may cause a connection to be established to the proxy server." Note that this sentence says "the" proxy server, implying that the proxy server already exists in the system.

As such, independent claims 1, 13, and 17 are in condition for allowance.

As to the dependent claims, these claims, being dependent upon allowable parent claims, are also in condition for allowance for the same reasons as described above. Furthermore, Applicants respectfully disagree with the Examiner's analysis of claim 10. The Examiner argues that paragraph [0065] of Shaffer teaches that "the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG".

The Examiner argues that the claimed limitation "reads on the priority of the VTG being changed based on an event associated with the VTG." First of all, the priority of the VTG in Shaffer is not changed. Rather, this paragraph describes how a maximum talk time for a user connected in a VTG can vary based on the priority of an event associated with the VTG. While "priority" is a parameter, it is not a parameter of the VTG, but is rather a parameter of a call or session. Nevertheless, changing the priority does not "conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" as required by claim 10. Notably, this argument was presented in the last response by the Applicants, but the Examiner failed to address this argument in the Final Office Action, merely stating that the Examiner "firmly submits" that this element is contained in Shaffer. This is not much of a response to Applicants' detailed arguments, to say the least.

For the above reasons, Applicants respectfully submit that the claims are in condition for allowance.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (408) 278-4056 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402--0938
(408) 278-4056

Date November 1, 2013 By / Marc Hanish /

Marc S. Hanish
Reg. No. 42,626

Electronic Patent Application Fee Transmittal

Application Number:	12127397
Filing Date:	27-May-2008
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Filer:	Thomas F. Brennan/Emily Clapp
Attorney Docket Number:	1370.356US1

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Notice of Appeal	1401	1	800	800
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	1251	1	200	200
Miscellaneous:				
			Total in USD ($)	**1000**

Electronic Acknowledgement Receipt

EFS ID:	17291176
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	21186
Filer:	Thomas F. Brennan/Emily Clapp
Filer Authorized By:	Thomas F. Brennan
Attorney Docket Number:	1370.356US1
Receipt Date:	01-NOV-2013
Filing Date:	27-MAY-2008
Time Stamp:	13:41:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$1000
RAM confirmation Number	11528
Deposit Account	190743
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		1370356US1PreAppealBrief.pdf	342914 76442caa34d4cbe2c0f324cb8827487e383ece58	yes	8

Multipart Description/PDF files in .zip description

Document Description	Start	End
Transmittal Letter	1	1
Extension of Time	2	2
Notice of Appeal Filed	3	3
Pre-Brief Conference request	4	8

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	32361 f742d5db52a4eb4ae0324fab7414c380bd0d6614	no	2

Warnings:

Information:

Total Files Size (in bytes):	375275

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Shmuel Shaffer et al.

Title: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Docket No.:	1370.356US1	Serial No.:	12/127,397
Filed:	May 27, 2008	Due Date:	November 18, 2013
Examiner:	Ankur Jain	Group Art Unit:	2649
Customer No.:	21123	Confirmation No.:	8388

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

X Notice of Appeal (1 pg.)
X Authorization to charge Deposit Account 19-0743 in the amount of $800.00 to cover the fee for the Notice of Appeal
X Pre-Appeal Brief (5 pgs.)
X Petition for Extension of Time (1 pg.)
X Authorization to charge Deposit Account 19-0743 in the amount of $200.00 to cover the Extension of Time Fee.

If not provided for in a separate paper filed herewith, please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
Customer No.: 21123

By: /Marc Hanish/
Marc S. Hanish
Reg. No. 42,626

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Shmuel Shaffer et al.	Examiner:	Ankur Jain
Serial No.:	12/127,397	Group Art Unit:	2649
Filed:	May 27, 2008	Docket:	1370.356US1
Customer No.:	21123	Confirmation No.:	8388
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		

PETITION FOR A ONE-MONTH EXTENSION OF TIME

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In accordance with the provision of 37 C.F.R § 1.136(a), it is respectfully requested that a one-month extension of time be granted in which to respond to the Final Office Action mailed July 18, 2013, said period of response being extended from October 18, 2013 to November 18, 2013.

Please charge Deposit Account No. 19-0743 in the amount of $200.00 to cover the required extension fee. Please charge any additional fees or credit overpayment to deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(408) 278-4056

Date November 1, 2013

By /Marc Hanish/
Marc S. Hanish
Reg. No. 42,626

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Shmuel Shaffer et al.	Examiner:	Ankur Jain
Serial No.:	12/127,397	Group Art Unit:	2649
Filed:	May 27, 2008	Docket:	1370.356US1
Customer No.	21123	Confirmation No.:	8388

Title: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

NOTICE OF APPEAL FROM THE DECISION OF THE EXAMINER TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with 37 C.F.R. § 41.31(a)(1), Applicants hereby appeal to the Board of Patent Appeals and Interferences from the decision dated July 18, 2013 of the Examiner rejecting claims 1-7, 10-17 and 19 of the above-identified patent application.

A request for an extension of time to respond to the Examiner's rejection is submitted herewith along with payment of the required extension fee.

Please charge the amount of $800.00 in payment of the Notice of Appeal fee under 37 C.F.R. § 41.20(b)(1), as well as any additional required fees, to Deposit Account No. 19-0743.

A Pre-Appeal Brief Request for Review is submitted herewith.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(408) 278-4056

Date November 1, 2013 By /Marc Hanish/

Marc S. Hanish
Reg. No. 42,626

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 10/28/2013

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	
ART UNIT	**PAPER NUMBER**
2649	

NOTIFICATION DATE	DELIVERY MODE
10/28/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
SLW@blackhillsip.com

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	12/127,397	SHAFFER ET AL.	
	Examiner	Art Unit	
	ANKUR JAIN	2649	

All participants (applicant, applicant's representative, PTO personnel):

(1) *ANKUR JAIN*. (3)_____.

(2) *Marc S. Hanish*. (4)_____.

Date of Interview: *10/22/2013*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *See Final Rejection*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

No agreement was reached between Applicant and Examiner. The claimed feature of "dynamically" was discussed, however the Examiner is maintaining the position made in the Final Rejection. No agreement on Allowability was discussed .

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Ankur Jain/ Examiner, Art Unit 2649	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Shmuel Shaffer et al.	Examiner: Ankur Jain	
Serial No.:	12/127,397	Group Art Unit: 2649	
Filed:	May 27, 2008	Docket No.: 1370.356US1	
Customer No.: 21123		Confirmation No.: 8388	
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		

EXAMINER INTERVIEW SUMMARY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

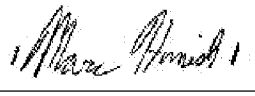
Applicants thank Examiner Ankur Jain for the courtesy of a telephone interview on October 22, 2013 with Applicants' representative Marc S. Hanish.

On October 22, 2013, a telephonic interview was conducted between Examiner Jain and Marc S. Hanish, Reg. No. 42,626. During the interview, the meaning of the term "dynamically" with respect to "inserting a proxy" was discussed. The Examiner maintained the position that the term "dynamically" be afforded its plain and ordinary meaning because there was no explicit definition provided in the specification. Applicant generally agreed, but disagreed with the Examiner as to the meaning of the term "dynamically" as known to one of ordinary skill in the art, in light of the specification. Applicant pointed out that the Examiner has not provided a definition for the term, and instead argued generally that the prior art's teaching of using a proxy was equivalent to dynamically inserting such a proxy. Applicant pointed out that such a broad interpretation essentially meant that the Examiner was ascribing no meaning to the term "dynamically", as that term could be removed from the claim and the claim would wind up having the same meaning to the Examiner. The Examiner agreed that removing the term would not change the meaning of the claim, but maintained that this was a proper interpretation. Applicant disagreed in light of the evidence provided by the Applicant as to the meaning of the term "dynamically" to one of ordinary skill in the art. No agreement was reached.

If necessary, please charge any additional fees or credit overpayment to Deposit Account 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(408) 278-4056

Date 10/25/13 By 

Marc S. Hanish
Reg. No. 42,626

Electronic Acknowledgement Receipt

EFS ID:	17228477
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	21186
Filer:	Thomas F. Brennan/Emily Clapp
Filer Authorized By:	Thomas F. Brennan
Attorney Docket Number:	1370.356US1
Receipt Date:	25-OCT-2013
Filing Date:	27-MAY-2008
Time Stamp:	13:02:47
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		1370356US1summary.pdf	133030 98fab726447c372bdcef84adcdb8e097643e67ad	yes	3

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Transmittal Letter	1	1
	Applicant summary of interview with examiner	2	3
Warnings:			
Information:			
	Total Files Size (in bytes):	133030	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Shmuel Shaffer et al.

Title: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Docket No.:	1370.356US1	Serial No.:	12/127,397
Filed:	May 27, 2008	Due Date:	N/A
Examiner:	Ankur Jain	Group Art Unit:	2649
Customer No.:	21123	Confirmation No.:	8388

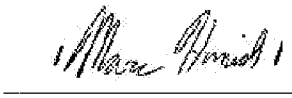
Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

X Examiner Interview Summary (2 pgs.)

If not provided for in a separate paper filed herewith, please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
Customer No.: 21123

By: 
Marc S. Hanish
Reg. No. 42,626

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 07/18/2013

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	

ART UNIT	PAPER NUMBER
2649	

NOTIFICATION DATE	DELIVERY MODE
07/18/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
SLW@blackhillsip.com

Office Action Summary	Application No.	Applicant(s)	
	12/127,397	SHAFFER ET AL.	
	Examiner	Art Unit	
	ANKUR JAIN	2649	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 May 2013*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-7,10-17 and 19* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-7, 10-17, and 19* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed on 5/14/2013 have been fully considered but are still found to be unpersuasive and the Examiner disagrees with all of Applicant's arguments.

As a preliminary comment, Applicant comments on page 6 of the Remarks that "the Examiner also argued that the term "inserting" could be read broadly as "employing." However, the Examiner disagrees with this comment, since the Examiner is not "broadly interpreting" the claimed "inserting," but is rather stating that both terms are equivalent as indicated in the explanation of the most recent Office Action. Thus, to make the record clear, the Examiner is using Applicant's explanation of the specification in step 714 of Figure 7 (as disclosed in the Interview Summary section of the 01/04/2013 Remarks which states that Paragraph 0056 describes how the proxy is dynamically inserted at 714) and the context of step 714 of Figure 7 as disclosed in Paragraphs 0017 and 0056 of Applicant's specification. The Examiner would like to comment that these Paragraphs of Applicant's specification clearly disclose that "at 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG," and how "a dynamic proxy component can employ a proxy for the endpoint based on the analysis and dynamically establish a path for communication."

Regarding pages 6-7 of the Remarks, Applicant comments that "employing a proxy" is not the same as "inserting a proxy." However, in view of Paragraph 0017 and 0056 of Applicant's specification and in view of the Interview Summary section of the

01/04/2013 Remarks which states that Paragraph 0056 describes how the proxy is dynamically inserted at 714, the Examiner firmly submits that there is no difference between “employing a proxy” and “inserting a proxy.” The Examiner would like to submit on record that according to Applicant's 01/04/2013 Remarks on the 1st page, Applicant comments that step 714 of Figure 7 of Applicant’s specification is equivalent to “dynamically inserting a proxy" as claimed. In addition, even though Applicant’s specification may use the phrase “inserting a proxy” in various instances, the Examiner firmly submits that this is no different than "employing a dynamic proxy," where “employing” means to use or make use of to one of ordinary skill in the art. Thus, taking into consideration Paragraph 0017 and 0056 of Applicant’s specification which clearly disclose that “at 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG,” and taking into consideration Applicant's comment/admission that this recitation of Paragraph 0056 is equivalent to the claimed "inserting a proxy,” the Examiner is construing the claimed "inserting a proxy" to mean "employing a proxy," or making use of a proxy.

Regarding pages 7-9 of the Remarks, Applicant’s major argument is with respect to the claimed “dynamically.” The Examiner would like to comment that there is nothing of record to show that the Examiner has equated the term “dynamically” to “vigorously” as asserted by Applicant. During the interview, the Examiner was merely explaining to Applicant that the term "dynamically" is a broad term and even in light of Applicant’s specification, the plain meaning of this term cannot be construed to be the meaning now offered by Applicant. The Examiner firmly submits on record that Applicant’s

specification is silent and does not explicitly define the claimed "dynamically" and what it means to "dynamically insert a proxy." Even though this term is used throughout the specification, there is simply no definition and the Examiner is giving this claimed feature its plain meaning and broadest reasonable interpretation according to MPEP 2111 and MPEP 2111.01.

According to MPEP 2111.01 Section I, "the best source for determining the meaning of a claim term is the specification - the greatest clarity is obtained when the specification serves as a glossary for the claim terms. The presumption that a term is given its ordinary and customary meaning may be rebutted by the applicant by clearly setting forth a different definition of the term in the specification. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). However, the Examiner would like to note that there is no definition of "dynamically" in the specification to mean what Applicant is now arguing this claimed feature to mean. Thus, Applicant's argument is moot and must be withdrawn.

According to MPEP 2111.01 Section IV, "when a patentee acts as his own lexicographer in redefining the meaning of particular claim terms away from their ordinary meaning, he must clearly express that intent in the written description." However, the Examiner would like to note that there is no definition of "dynamically" in the specification to mean what Applicant is now arguing this claimed feature to mean. Thus, Applicant's argument is moot and must be withdrawn.

According to MPEP 2173.05(a) Section III, "consistent with the well-established axiom in patent law that a patentee or applicant is free to be his or her own

lexicographer, a patentee or applicant may use terms in a manner contrary to or inconsistent with one or more of their ordinary meanings if the written description clearly redefines the terms. See, e.g., *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999) ("While we have held many times that a patentee can act as his own lexicographer to specifically define terms of a claim contrary to their ordinary meaning," in such a situation the written description must clearly redefine a claim term "so as to put a reasonable competitor or one reasonably skilled in the art on notice that the patentee intended to so redefine that claim term."); *Hormone Research Foundation Inc. v. Genentech Inc.*, 904 F.2d 1558, 15 USPQ2d 1039 (Fed. Cir. 1990). However, the Examiner would like to note that there is no definition of "dynamically" in the specification to mean what Applicant is now arguing this claimed feature to mean. Thus, Applicant's argument is moot and must be withdrawn.

Regarding page 10 of the Remarks, Applicant's major argument is with respect to the Shell reference. However, the Examiner firmly submits that "a dynamic proxy component that is employed to dynamically insert a proxy based on a determination" is equivalent to Paragraph 0090 and Figures 1-3 of Shell. The Examiner submits that this limitation clearly reads on how connection service provider manager 214 causes connection service provider modules 220 to establish a connection to the destination network. For example, if the most appropriate connection method is determined to be through a proxy server, then proxy 225, or "dynamic proxy component," may cause a connection to be established via an "inserted" or employed proxy server. Furthermore,

it does not appear that Applicant is rebutting the Examiner's interpretation of this Paragraph, but rather is still arguing over the "inserting" versus "employing" limitations as rebutted by the Examiner above. Nevertheless, the Examiner is maintaining the rejections.

Regarding page 11 of the Remarks, Applicant's major argument is with respect to claim 10. However, the Examiner still firmly submits that Shaffer teaches "wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" (see Paragraph 0065). The claimed limitation reads on the priority of the VTG being changed based on an event associated with the VTG.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 7, 10-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al, US 2007/0105579 A1 (hereafter referenced as Shaffer), in view of Shell et al, US 2004/0224668 A1 (hereafter referenced as Shell), and further in view of Parkkinen et al, US 2011/0004636 A1 (hereafter referenced as Park).

Regarding **Claim 1, 13, and 17**, Shaffer teaches "receiving information associated with an endpoint" (see Paragraphs 0053-0054, 0058, and Figure 3). Shaffer

teaches “an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism” (see Paragraphs 0053-0054, 0058, 0063 and Figure 3). The claimed limitation clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is “determined” and "analyzed" by IS 100. Shaffer also teaches “when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism” (see Paragraphs 0053-0054, 0058, 0063 and Figure 3). The claimed limitation clearly reads on the full-duplex endpoint 80 not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is “determined” and "analyzed" by IS 100. Shaffer also teaches “capabilities of the predefined floor control mechanism, the capabilities comprising quality of service and rules of transmission” (see Paragraph 0065, 0077, 0090, Figure 3, and Figure 5). With respect to “quality of service” according to Paragraph 0090, the Examiner firmly submits that this claimed feature reads on endpoint 203 monitoring bandwidth and determining whether to send a user communication to each of a user-selected number of VTG streams or whether to send separate streams for transmission to each of the user-selected number of VTG streams, where this determination may be based on whether transmission over WAN 208 can be accomplished at a specified or appropriate quality level. In support, according to Paragraph 0077, Interoperability Server 210 may be

similar to Interoperability Server 50 and may enable interoperable VTG communications among endpoints of different communication networks. With respect to “rules of transmission," according to Paragraph 0065, this claimed feature clearly reads on how Interoperability Server 100 may have a policy that determines the maximum amount of time that a particular user may control the floor based on priority for example. Shaffer does not teach “a dynamic proxy component that is employed to dynamically insert a proxy based on a determination.” However, Shell teaches “a dynamic proxy component that is employed to dynamically insert a proxy based on a determination” (see Paragraph 0090 and Figures 1-3). The Examiner would like to submit on record that according to Applicant's Remarks on the 1st page, Applicant admits on record that step 714 of Figure 7 of Applicant’s specification is equivalent to “dynamically inserting a proxy" as claimed. In addition, even though Applicant’s specification may use the phrase “inserting a proxy” in various instances, the Examiner firmly submits that this is no different than "employing a dynamic proxy," where “employing” means to use or make use of to one of ordinary skill in the art. Thus, taking into consideration Paragraph 0056 of Applicant’s specification which clearly discloses that “at 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG,” and taking into consideration Applicant's admission that this recitation of Paragraph 0056 is equivalent to the claimed "inserting a proxy,” the Examiner is construing the claimed "inserting a proxy" to mean "employing a proxy," or making use of a proxy. Thus, the claimed limitation clearly reads on how connection service provider manager 214 causes connection service provider modules 220 to establish a connection to the destination

network. For example, if the most appropriate connection method is determined to be through a proxy server, then proxy 225, or "dynamic proxy component," may cause a connection to be established via an "inserted" or employed proxy server. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Shaffer to incorporate a dynamic proxy component that is employed to dynamically insert a proxy based on a determination, as taught by Shell, for the purpose of increasing the functionality and versatility of the proxy media service system of Shaffer, and since Shaffer identically discloses a proxy media service 220 as disclosed in Paragraph 0080 and Figure 5. The combination of Shaffer and Shell does not teach "trusted endpoint identity." However, Park teaches "trusted endpoint identity" (see Paragraph 0050, 0058, and Figure 5). The claimed limitation clearly reads on pre-setting trusted devices whose authentication may be used for granting access, as disclosed in Paragraph 0058. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination to include trusted endpoint identity as taught by Park, for the purpose of enhancing the security, functionality, and versatility of the system for providing a proxy media service of Shaffer when an originating endpoint tries to gain access through a VTG, and since both Shaffer and Park identically disclose PTT communications as disclosed in Paragraph 0050 of Park and Paragraph 0058 of Shaffer.

Regarding **Claim 2**, Shaffer teaches "wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams" (see Paragraph 0063). The claimed

limitation clearly reads on the floor control denial signal if endpoint 90, for example, has the floor.

Regarding **Claim 3**, Shaffer teaches "further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization" (see Paragraph 0064-0065). The claimed limitation clearly reads on how IS 100 "optimizes resource utilization" by preventing certain endpoints from controlling the floor for extended amounts of time.

Regarding **Claim 7**, Shaffer teaches "an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis" (see Paragraphs 0053-0054, 0058, 0063, and Figure 3). The claimed limitation reads on full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" by IS 100.

Regarding **Claim 15**, Shaffer teaches "wherein one or more disparate endpoints identify the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint" (see Paragraph 0063). The claimed limitation reads on full-duplex endpoint 80 receiving a floor control denial signal, which is indicative of endpoint 80 "non-conforming with the floor control mechanism based in part on monitoring the endpoint."

Regarding **Claim 16**, Shaffer teaches "wherein an entity is conforming with the floor control mechanism if it adheres to predefined quality of service and rules of transmission" (see Paragraphs 0053-0054, 0058, 0063, 0065, 0077, 0090, and Figures

3 and 5). Park teaches "trusted endpoint identity" (see Paragraph 0050, 0058, and Figure 5).

Regarding **Claim 10**, Shaffer teaches "wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" (see Paragraph 0065). The claimed limitation reads on the priority of the VTG being changed based on an event associated with the VTG.

Regarding **Claim 11**, Shell teaches "wherein the dynamic proxy component dynamically establishes a communication path between an endpoint and one or more disparate endpoints" (see Paragraph 0090 and Figures 1-3). The claimed limitation clearly reads on how proxy 225 may cause a connection to be established to a proxy server. Shaffer teaches "based in part on the analysis" (see Paragraphs 0053-0054, 0058, and Figure 3).

Regarding **Claim 12**, Shaffer teaches "a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG" (see Paragraph 0058 and 0063). "Media capabilities of the endpoint" clearly reads on the full duplex endpoint 80, and the "determination" clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" by IS 100.

Regarding **Claim 14**, Shaffer teaches "identifying at least one of media capability information or identity information associated with the endpoint" (see Paragraph 0061).

"Identity information associated with the endpoint" clearly reads on recognizing that endpoint 80 is connected via a full duplex connection.

Regarding **Claim 19**, Shaffer teaches "means for dynamically establishing a communication path between the devices based in part on the analysis" (see Paragraphs 0053-0054 and 0058). The claimed limitation reads on granting floor control to endpoint 80.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Shell and Park, as applied to Claims 1 and 4-5, and further in view of Grealish et al, US 2009/0093235 A1 (hereafter referenced as Grealish).

Regarding **Claim 4**, the combination of Shaffer and Shell and Park does not teach "an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint." However, Grealish teaches "an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint" (see Paragraphs 0031 and 0035). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination to include an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint as taught by Grealish, for the purpose of enhancing the functionality and versatility of IS 100 when acting as an intermediary between half duplex endpoints 90 and full duplex endpoint 80, which are part of different communication networks and are non-compatible communication devices.

Regarding **Claim 5**, the combination of Shaffer, Shell, Park, and Grealish teaches "wherein the identity collection component employs credentials resident on the endpoint" (see Paragraphs 0031 and 0035 of Grealish). The claimed limitation clearly reads on the make, model, and device features, including data storage capabilities of the "endpoint."

Regarding **Claim 6**, the combination of Shaffer, Shell, Park, and Grealish teaches "security risk associated with the endpoint" (see Paragraph 0031 and 0035 of Grealish). The combination also teaches "transmitting into a given VTG without adhering with the floor control policy of the system" (see Paragraph 0066 of Shaffer). The claimed limitation clearly reads on how full duplex endpoint 80 may not understand or otherwise be capable of communication with the VTG.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANKUR JAIN whose telephone number is (571)272-9747. The examiner can normally be reached on M-F, 9:00 am to 4:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANKUR JAIN can be reached on (571)272-9747. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ankur Jain/

Examiner, Art Unit 2649

/Yuwen Pan/

Supervisory Patent Examiner, Art Unit 2649

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	Art Unit
	ANKUR JAIN	2618

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	02/03/2012	10/06/2012	07/03/2013						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	✓	✓						
	6	✓	✓	✓						
	7	✓	✓	✓						
	8	✓	✓	-						
	9	✓	✓	-						
	10	✓	✓	✓						
	11	✓	✓	✓						
	12	✓	✓	✓						
	13	✓	✓	✓						
	14	✓	✓	✓						
	15	✓	✓	✓						
	16	✓	✓	✓						
	17	✓	✓	✓						
	18	✓	✓	-						
	19	✓	✓	✓						
	20	N	-	-						
	21	N	-	-						
	22	N	-	-						
	23	N	-	-						
	24	N	-	-						
	25	N	-	-						
	26	N	-	-						
	27	N	-	-						

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Shmuel Shaffer et al.	Examiner: Ankur Jain	
Serial No.:	12/127,397	Group Art Unit: 2649	
Filed:	May 27, 2008	Docket No.: 1370.356US1	
Customer No.:	21123	Confirmation No.: 8388	
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		

AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.111

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In response to the Office Action dated March 15, 2013, please amend the application as follows:

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) An apparatus, comprising:

an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism; and

a dynamic proxy component that is employed to dynamically insert a proxy that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity.

2. (Original) The apparatus of claim 1, wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams.

3. (Original) The apparatus of claim 1, further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization.

4. (Original) The apparatus of claim 1, further comprising an identity collection component that receives an identity of the endpoint to assess a security risk associated with the endpoint.

5. (Original) The apparatus of claim 4 wherein the identity collection component employs credentials resident on the endpoint.

6. (Original) The apparatus of claim 5, wherein the security risk associated with the endpoint is that the endpoint transmits into a given VTG without adhering with the floor control policy of the system.

7. (Original) The apparatus of claim 1, further comprising an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis.

8. (Cancelled)

9. (Cancelled)

10. (Previously Presented) The apparatus of claim 1 wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG.

11. (Original) The apparatus of claim 1, wherein the dynamic proxy component dynamically establishes a communication path between the endpoint and one or more disparate endpoints based in part on the analysis.

12. (Original) The apparatus of claim 1, further comprising a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG.

13. (Previously Presented) A method, comprising:

receiving information associated with an endpoint;

identifying information associated with adherence of the endpoint with a predefined floor control mechanism;

analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism.

14. (Original) The method of claim 13, further comprising identifying at least one of media capability information or identity information associated with the endpoint.

15. (Original) The method of claim 13, further comprising identifying the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

16. (Previously Presented) The method of claim 15, wherein an entity is conforming with the floor control mechanism if it adheres to predefined quality of service, rules of transmission, and trusted endpoint identity.

17. (Previously Presented) A system, comprising:

means for receiving information associated with an endpoint;

means for identifying information associated with adherence of the endpoint with a predefined floor control mechanism;

means for analyzing the identified information to evaluate if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

means for dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism.

18. (Cancelled)

19. (Original) The system of claim 17, further comprising means for dynamically establishing a communication path between the devices based in part on the analysis.

20-27. (Canceled)

REMARKS

This responds to the Office Action dated March 15, 2013.

Claims 1-7, 10-17 and 19 are pending in this application.

Interview Summary

Applicant thanks Examiner Ankur Jain for the courtesy of a telephone interview on May 7, 2013 with Applicant's representative Marc S. Hanish. During the interview, the interpretation of the phrase "dynamically inserting a proxy" was discussed. The Examiner argued that the term "dynamically" could be read broadly simply to mean "vigorously." The Examiner also argued that the term "inserting" could be read broadly as "employing." Applicant disagreed with both interpretations. No agreement was reached. Applicant indicated that further a review of the Specification would be undertaken with an eye towards amending these elements, however Applicant has since determined that no such amendment is needed and respectfully maintains that the Examiner's interpretation is too broad.

The Rejection of Claims Under § 103

Claims 1-3, 7, 10-17, and 19 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaffer et al. (U.S. Publication No. 2007/0105579 A1; hereafter referred to as "Shaffer"), in view of Shell et al. (U.S. Publication No. 2004/0224668 A1; hereafter referred to as "Shell"), and further in view of Parkkinen et al. (U.S. Publication No. 2011/0004636 A1; hereafter referred to as "Parkkinen").

Claims 4-6 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaffer, in view of Shell and Park, and further in view of Grealish et al. (U.S. Publication No. 2009/0093235 A1; hereafter referred to as "Grealish").

Applicant respectfully traverses the rejections. Specifically, Applicant respectfully disagrees with the Examiner's interpretation of "dynamically inserting a proxy."

Specifically, the Examiner states the following on pages 4-5 of the Office Action:

> The Examiner would like to submit on record that according to Applicant's Remarks on the 1st page, Applicant admits on record that step 714 of Figure 7 of Applicant's specification is equivalent to "dynamically inserting a proxy" as claimed. In addition,

> even though Applicant's specification may use the phrase "inserting a proxy" in various instances, the Examiner firmly submits that this is no different than "employing a dynamic proxy." where "employing" means to use or make use of to one of ordinary skill in the art. Thus, taking into consideration Paragraph 0056 of Applicant's specification which clearly discloses that "at 714. a dynamic proxy can be employed for attaching the endpoint device to the VTG." and taking into consideration Applicant's admission that this recitation of Paragraph 0056 is equivalent to the claimed inserting a proxy." the Examiner is construing the claimed "inserting a proxy" to mean "employing a proxy." or making use of a proxy. Thus, the claimed limitation clearly reads on how connection service provider manager 214 causes connection service provider modules 220 to establish a connection to the destination network. For example, if the most appropriate connection method is determined to be through a proxy server, then proxy 225, or "dynamic proxy component," may cause a connection to be established via an "inserted" or employed proxy server. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Shaffer to incorporate a dynamic proxy component that is employed to dynamically insert a proxy based on a determination, as taught by Shell, for the purpose of increasing the functionality and versatility of the proxy media service system of Shaffer, and since Shaffer identically discloses a proxy media service 220 as disclosed in Paragraph 0080 and Figure 5.

Applicant does not believe that any statements made in the Response to Final Office Action constitutes an admission that step 14 of Figure 7 is "equivalent" to "dynamically inserting a proxy." More to the point, however, the Examiner appears to somehow be attempting to read to terms "dynamically" and "inserting" out of the claim language, by arguing that "inserting a proxy" is equivalent to "employing a proxy."

Applicant respectfully submits that "employing a proxy" is not the same as "inserting a proxy," "employing a dynamic proxy", or "dynamically inserting a proxy. If a proxy is inserted into a system, it inherently was not in the system at some point prior to the inserting. As described in Response to the Final Office Action, Shaffer teaches a system where the proxy is simply always present, and thus there would never be a case of the proxy being "inserted" into the system. "Dynamically inserting a proxy" indicates that the insertion is performed while the system is operating.

The Examiner attempts to utilize a general dictionary definition of the term "dynamic" as meaning "vigorously." Applicant recognizes that standard English dictionaries may described definitions that are different than those known to ordinary skill in the art. The Examiner argues that he is required to utilize the broadest reasonable interpretation. However, MPEP 2111 requires that claims must be interpreted "not solely on the basis of the claims language, but upon

giving claims their broadest reasonable construction '***in light of the specification as it would be interpreted by one of ordinary skill in the art***'"[1]. There may be different definitions for terms in different contexts, but Applicant respectfully asserts that nobody of ordinary skill in the art could reasonably interpret the term "dynamically" to mean vigorously.

Furthermore, claims are given their plain meaning unless such meaning is inconsistent with the specification, but MPEP 2111.01(I) states that "[t]he plain meaning of a term means the ordinary and customary meaning given to the term by those of ordinary skill in the art at the time of the invention."

The term "dynamic," while perhaps defined in general use circumstances as "vigorously", does not mean "vigorously" to one of ordinary skill in the art. Additionally, such an interpretation also is inconsistent with the use of the term "dynamic" in the specification.

The field of the present application is computer devices, and as such the plain meaning of terms must be interpreted in light of their meaning in the computing field. For example, the New Penguin Dictionary of Computing, by Dick Pountain (2001) states that the term "dynamic" is "used of any computing resource that is created or allocated when needed, rather than having a more permanent existence." Applicant respectfully submits that this is the plain meaning of the term as used in the art.

This definition is also consistent with the Specification. While no explicit definition of "dynamic" is used in the Specification, paragraph [0026] states: "[t]he subject disclosure relates generally to communication networks and in particular to an interoperability system that **facilitates a dynamic insertion of a media proxy based on capability negotiation.**" Since the insertion of a media proxy is based on capability negotiation, which does not take place until the system is up and running (and negotiating the capabilities), then the dynamic insertion of the media proxy must mean that it was inserted when needed (and not before).

The Examiner's proposed definition ("vigorously") makes no sense in light of the specification, as it is unclear how exactly a computing device can be said to do anything "vigorously" or "not vigorously". A computer either does something, or doesn't do something.

---

[1] MPEP 2111(quoting from *Phillips v. AWH*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005).

Nevertheless, because this definition is based solely on a dictionary definition that is non-specific to the computing arts, Applicant respectfully submits that such an interpretation is incorrect.

Further, the Examiner's attempt to alter the scope of the claims based on the statements made in the Response to Office Action pointing out the support in paragraph [0034] lacks proper basis. Paragraph [0034] states, with regard to step 714:

> At 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG. In one embodiment, if the endpoint is admitted into a VTG without proper credentials, it can be monitored for its adherence with a floor control policy, such as a specified rule of transmission. **If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted** between the endpoint and the VTG.

Thus, even if one were to somehow interpret "employing a dynamic proxy" as different than "dynamically inserting a proxy", it is clear that paragraph [0034] at least teaches an embodiment where the proxy is actually dynamically inserted, and thus there is no need for the examiner to attempt to rely on a convoluted analysis as to why the clear language "dynamically inserting a proxy" somehow doesn't mean "dynamically inserting a proxy" and instead means "employing a proxy." It is indeed unusual for the Examiner to argue, as in this case, that the specification actually broadens the scope of the claims beyond the plain meaning of the term and beyond the explicit use of the term in the Specification. Nevertheless, the Examiner's attempts to utilize the Specification to broaden the scope of the claim language are improper in light of the clear description of the step in the specification, with exactly the same language used by way of example.

The result of all this, of course, is that the prior art still does not teach or suggest the claims. Specifically, as described in the Response to Final Office Action, Shaffer discloses a proxy media service (PMS), but this is present all the time, and handles communication with both endpoints in adherence with the floor control mechanism (full duplex) and endpoints not in adherence (half duplex). This is depicted as PMS 220 in FIG. 5, reproduced below.

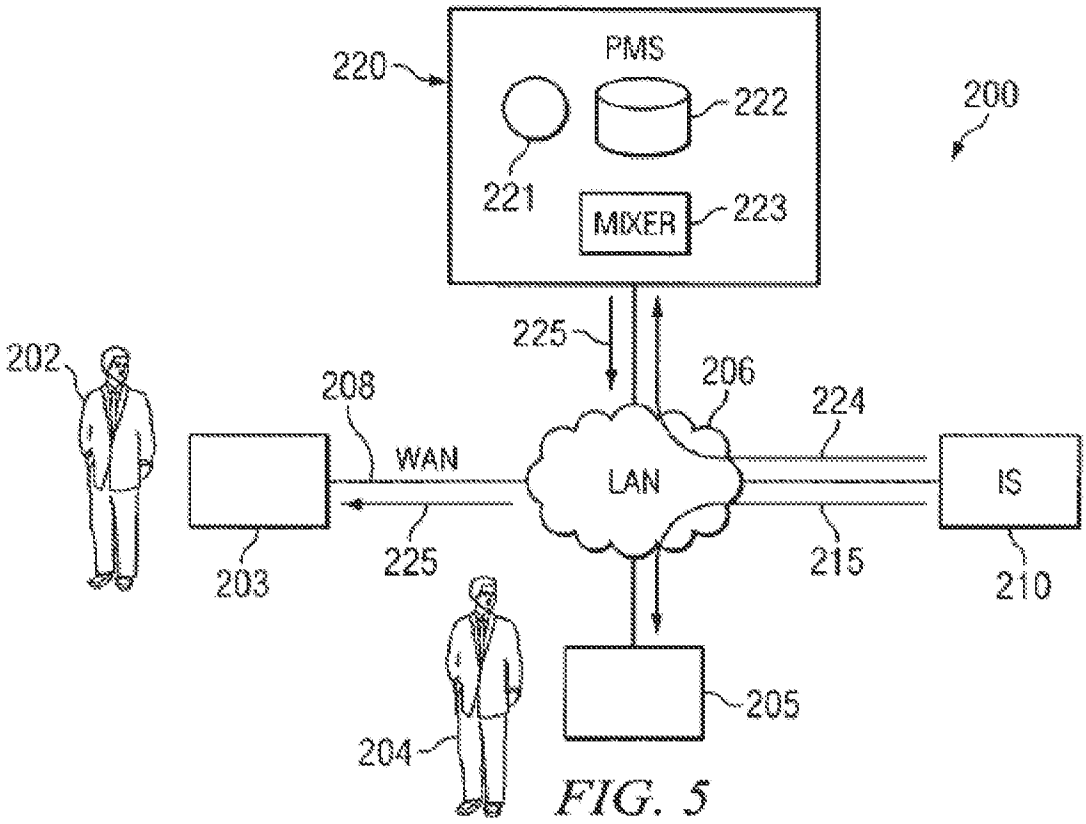


FIG. 5

There is nothing dynamic about the use of this proxy; it is simply used all the time.

Shell discloses a generic proxy server, but again there is nothing suggesting that this proxy server is dynamically inserted, as opposed to simply always being present, let alone specifically being dynamically inserted when an endpoint is determined to not be in adherence with a floor control mechanism. Shell does say that the proxy server may be used of it is the most appropriate connection method, but there is no indication that this proxy server is dynamically inserted after it is determined that it is the most appropriate connection method. Instead, the proxy server in Shell is simply always present and is used or not used depending upon whether or not a particular connection requires it. This is indeed implied in paragraph [0090], which states "For example, if the most appropriate connection method is determined to be through a proxy server, proxy 225 may cause a connection to be established to the proxy server." Note that this sentence says "the" proxy server, implying that the proxy server already exists in the system.

As such, independent claims 1, 13, and 17 are in condition for allowance.

As to the dependent claims, these claims, being dependent upon allowable parent claims, are also in condition for allowance for the same reasons as described above. Furthermore, Applicant respectfully disagrees with the Examiner's analysis of claim 10. The Examiner argues that paragraph [0065] of Shaffer teaches that "the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG". Paragraph [0065] states:

> **[0065]** In some embodiments, IS **100** may have a policy that determines the maximum amount of time that a particular user may control the floor (e.g., a maximum talk time). This maximum talk time may vary by user. For example, higher priority users (e.g., higher ranked users or users in higher positions within an organization) may be allotted a longer maximum talk time. In some cases, a maximum talk time for a user communicating on a full duplex endpoint in a VTG with users of half-duplex devices may vary based on a type or priority of an event associated with the VTG. For example, higher priority events or events of a particular type (e.g., a terrorist event) may allow a shorter or longer maximum talk time while lower priority events or events of another type (e.g., a car accident) may allow a different maximum talk time.

The Examiner argues that the claimed limitation "reads on the priority of the VTG being changed based on an event associated with the VTG." First of all, the priority of the VTG is not changed. Rather, this paragraph describes how a maximum talk time for a user connected in a VTG can vary based on the priority of an event associated with the VTG. While "priority" is a parameter, it is not a parameter of the VTG, but is rather a parameter of a call or session. Nevertheless, changing the priority does not "conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" as required by claim 10. For the above reasons, Applicant respectfully submits that the claims are in condition for allowance.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (408) 278-4056 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402--0938
(408) 278-4056

Date 5/13/13

By /Marc Hanish/
Marc S. Hanish
Reg. No. 42,626

APPENDIX

The New Penguin Dictionary of Computing

Dick Pountain



PENGUIN BOOKS

Motorola - Exhibit 1028 - Page 209

PENGUIN BOOKS

Penguin Books Ltd, 80 Strand, London WC2R 0RL, England
Penguin Putnam Inc., 375 Hudson Street, New York, New York 10014, USA
Penguin Books Australia Ltd, 250 Camberwell Road, Camberwell, Victoria 3124, Australia
Penguin Books Canada Ltd, 10 Alcorn Avenue, Toronto, Ontario, Canada M4V 3B2
Penguin Books India (P) Ltd, 11 Community Centre, Panchsheel Park, New Delhi – 110 017, India
Penguin Books (NZ) Ltd, Cnr Rosedale and Airborne Roads, Albany, Auckland, New Zealand
Penguin Books (South Africa) (Pty) Ltd, 24 Sturdee Avenue, Rosebank 2196, South Africa

Penguin Books Ltd, Registered Offices: 80 Strand, London WC2R 0RL, England
www.penguin.com

First published 2003
1

Copyright © Dick Pountain, 2003
All rights reserved

The moral right of the author has been asserted

Typeset in Theantiqua and TheSans
Edited and typeset by Book Creation Services Ltd, London
Printed in England by Clays Ltd, St Ives plc

Except in the United States of America, this book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form of binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser

9 780140 514

There has been a great confusion over DVD standards and nomenclature. Current read-only DVD drives are also called *DVD-ROM* (and now also read CD-ROMs), but differing regional formats have been adopted in an attempt to prevent US DVD films being viewed outside the USA. There are four incompatible recordable DVD formats. The write-once version for computer data is called *DVD-R*, uses dye technology like that in CD-R and holds 4.7 GB per side. There are three rival rewriteable formats called DVD-RAM (2.6 GB, supported by Toshiba and the DVD Forum), DVD-RW (4.7 GB, supported by Pioneer); and DVD+RW (3 GB, supported by Sony, Philips, HP and Ricoh).

DVD-R See under DVD.

DVD-RAM See under DVD.

DVD Read Only See under DVD.

DVD Recordable See under DVD.

DVD-ROM See under DVD.

DVD+RW See under DVD.

DVD-RW See under DVD.

DVI Abbreviation of DIGITAL VIDEO INTERACTIVE.

Dvorak keyboard An improved KEYBOARD layout proposal as an alternative to QWERTY, which enables faster typing by placing the most frequently used letters adjacent to the home keys. Its three alphabet rows are:

', . p y f g c r l / +
a o e u i d h t n s -
; q j k x b m w v z

Many PC keyboards can be reconfigured to the Dvorak layout by running a utility program and then swapping the key-caps around.

DXF (Drawing Exchange format) An export file format first introduced by the AUTOCAD technical drawing program which is now widely used as an interchange format to move drawings from one drawing system to another.

dyadic operator Any mathematical OPERATOR, such as + (addition) or * (multiplication) that takes two ARGUMENTS. Sometimes called a 'binary operator', but in computing contexts this risks confusion with the digital meaning of BINARY.

dye-sublimation printer A type of non-impact colour PRINTER that uses heated electrodes to evaporate a solid wax-like ink onto the paper. Dye-sublimation is an expensive technology that produces extremely high quality output using a special high-gloss coated paper comparable with a photographic print. It is being rapidly displaced by the colour LASER PRINTER and improvements in INKJET PRINTER quality.

dye-transfer printer An obsolescent class of colour printer that works by transferring coloured dyes from a thin plastic film onto the paper, using either heat or mechanical impact. See also DYE-SUBLIMATION PRINTER.

dynamic Used of any computing resource that is created or allocated when needed, rather than having a more permanent existence. Its opposite is STATIC. See for example DYNAMIC ALLOCATION, DLL, DYNAMIC ROUTING.

dynamic address An ADDRESS acquired by an intelligent network device such as a BRIDGE, ROUTER or SWITCH from the DATA PACKETS it has processed, as opposed to an address that has been manually entered into the device's address table by a network administrator.

dynamic allocation The allocation of extra memory to a program while it is running. Dynamic allocation is employed to build data structures whose size cannot be predicted in advance and which may grow and shrink during execution, such as LISTS and TREES. To avoid running out of memory, dynamically allocated blocks of memory should be released when they are no longer needed. See also MALLOC, GARBAGE COLLECTION, MEMORY LEAK.

dynamic binding An alternative name for LATE BINDING. See also BINDING.

Dynamic Data Exchange (DDE) A PROTOCOL once used by Microsoft to provide communication between different application programs on a CLIENT/SERVER basis. Whenever a DDE server application modifies a shared document, one or more client applications will be informed via a DDE message that contains the modified portions of data. DDE is now obsolete, replaced by COM AUTOMATION, but support for it may still be encountered in older programs that can act as a DDE client or server or both.

Dynamic DNS (DDNS) 1 A type of INTERNET service that enables net users to create sites or other resources that can be accessed via a normal FULLY QUALIFIED DOMAIN NAME despite having been allocated a dynamic ADDRESS that changes every time they go online (say by an INTERNET SERVICE PROVIDER that has more customers than IP addresses or by a local area network that employs DYNAMIC HOST CONFIGURATION PROTOCOL). A DDNS service provides an alias for the resource, so the DNS entry is automatically updated when it is put online; some DDNS services charge for this service, while others are free.

2 A facility in Microsoft's WINDOWS 2000 that integrates the functions of the proprietary WINDOWS INTERNET NAMING SERVICE with the public DNS system. When a Windows 2000 server goes online, it publishes its name and IP ADDRESS automatically to the DNS server.

Dynamic Host Configuration Protocol (DHCP) A PROTOCOL developed by Microsoft that dynamically allocates IP ADDRESSES to IBM-compatible PCs connected to a Windows NT local area network using TCP/IP. System administrators can assign a range of IP addresses to the DHCP server and configure each client PC to request an address from the server when logging on to the network.

Dynamic HTML (DHTML) An extension to HTML created by Microsoft that offers greater control over the layout of WEB PAGES and enables them to interact with the user without the client BROWSER having to go back to the server. Under DHTML, HTML tags become scriptable objects which expose methods (see OBJECT MODEL), and code may be embedded directly into web pages, while the appearance of a page is kept separate from its structure through the use of CASCADING STYLE SHEETS. DHTML tags can raise EVENTS similar to those used in VISUAL BASIC to capture user interactions such as clicking on a button or moving the mouse pointer. It also supports

Electronic Acknowledgement Receipt

EFS ID:	15776085
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	21186
Filer:	Alison Nemier Sachs/Laura Johnson
Filer Authorized By:	Alison Nemier Sachs
Attorney Docket Number:	1370.356US1
Receipt Date:	14-MAY-2013
Filing Date:	27-MAY-2008
Time Stamp:	17:27:45
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		1370_356US1_NFOAresponse.pdf	1554517 3f95daec5ce372d3e6b102571b1ad5d196ef8c2d	yes	17

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Miscellaneous Incoming Letter	1	1
	Amendment/Req. Reconsideration-After Non-Final Reject	2	2
	Claims	3	6
	Applicant Arguments/Remarks Made in an Amendment	7	17

Warnings:	
Information:	
Total Files Size (in bytes):	1554517

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Shmuel Shaffer et al.

Title: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Docket No.:	1370.356US1	Serial No.:	12/127,397
Filed:	May 27, 2008	Due Date:	June 15, 2013
Examiner:	Ankur Jain	Group Art Unit:	2649
Customer No.:	21123	Confirmation No.:	8388

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

X Amendment and Response under 37 C.F.R. § 1.111 (16 pgs.)

If not provided for in a separate paper filed herewith, please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
Customer No.: 21123

By: /Marc Hanish/
Marc S. Hanish
Reg. No. 42,626

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 14th day of May, 2013.

Laura Johnson
Name

/Laura Johnson/
Signature

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 12/127,397	Filing Date 05/27/2008	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **05/14/2013**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 16	Minus	** 27	= 0	X $80 =	0
Independent (37 CFR 1.16(h))	* 4	Minus	***5	= 0	X $420 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/ERIC DANTZLER/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 05/13/2013

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	

ART UNIT	PAPER NUMBER
2649	

NOTIFICATION DATE	DELIVERY MODE
05/13/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
SLW@blackhillsip.com

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	12/127,397	SHAFFER ET AL.	
	Examiner	Art Unit	
	ANKUR JAIN	2649	

All participants (applicant, applicant's representative, PTO personnel):

(1) *ANKUR JAIN*. (3)_____.

(2) *Marc S. Hanish*. (4)_____.

Date of Interview: *07 May 2013*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *Shell reference*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Applicant requested the interview in order for Examiner to clarify the interpretation of the claimed feature of "a dynamic proxy component that is employed to dynamically insert a proxy." Now that Applicant has a better understanding of Examiner's position, Applicant will take the necessary steps in order to move prosecution forward. No agreement was reached and the Examiner is maintaining the references of record.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Ankur Jain/ Examiner, Art Unit 2649	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 03/15/2013

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	
ART UNIT	**PAPER NUMBER**
2649	

NOTIFICATION DATE	DELIVERY MODE
03/15/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
SLW@blackhillsip.com

Office Action Summary	Application No.	Applicant(s)	
	12/127,397	SHAFFER ET AL.	
	Examiner	Art Unit	
	ANKUR JAIN	2649	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2013*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-7,10-17 and 19* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-7, 10-17, and 19* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/04/2013 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 7, 10-17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al, US 2007/0105579 A1 (hereafter referenced as Shaffer), in view of Shell et al, US 2004/0224668 A1 (hereafter referenced as Shell), and further in view of Parkkinen et al, US 2011/0004636 A1 (hereafter referenced as Park).

Regarding **Claim 1, 13, and 17**, Shaffer teaches “receiving information associated with an endpoint” (see Paragraphs 0053-0054, 0058, and Figure 3). Shaffer teaches “an analysis component that dynamically determines if an endpoint should be

connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism" (see Paragraphs 0053-0054, 0058, 0063 and Figure 3). The claimed limitation clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" and "analyzed" by IS 100. Shaffer also teaches "when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism" (see Paragraphs 0053-0054, 0058, 0063 and Figure 3). The claimed limitation clearly reads on the full-duplex endpoint 80 not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" and "analyzed" by IS 100. Shaffer also teaches "capabilities of the predefined floor control mechanism, the capabilities comprising quality of service and rules of transmission" (see Paragraph 0065, 0077, 0090, Figure 3, and Figure 5). With respect to "quality of service" according to Paragraph 0090, the Examiner firmly submits that this claimed feature reads on endpoint 203 monitoring bandwidth and determining whether to send a user communication to each of a user-selected number of VTG streams or whether to send separate streams for transmission to each of the user-selected number of VTG streams, where this determination may be based on whether transmission over WAN 208 can be accomplished at a specified or appropriate quality level. In support, according to Paragraph 0077, Interoperability Server 210 may be similar to Interoperability Server 50 and may enable interoperable VTG communications

among endpoints of different communication networks. With respect to “rules of transmission," according to Paragraph 0065, this claimed feature clearly reads on how Interoperability Server 100 may have a policy that determines the maximum amount of time that a particular user may control the floor based on priority for example. Shaffer does not teach “a dynamic proxy component that is employed to dynamically insert a proxy based on a determination.” However, Shell teaches “a dynamic proxy component that is employed to dynamically insert a proxy based on a determination” (see Paragraph 0090 and Figures 1-3). The Examiner would like to submit on record that according to Applicant's Remarks on the 1st page, Applicant admits on record that step 714 of Figure 7 of Applicant’s specification is equivalent to “dynamically inserting a proxy" as claimed. In addition, even though Applicant’s specification may use the phrase “inserting a proxy” in various instances, the Examiner firmly submits that this is no different than "employing a dynamic proxy," where “employing” means to use or make use of to one of ordinary skill in the art. Thus, taking into consideration Paragraph 0056 of Applicant’s specification which clearly discloses that “at 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG,” and taking into consideration Applicant's admission that this recitation of Paragraph 0056 is equivalent to the claimed "inserting a proxy,” the Examiner is construing the claimed "inserting a proxy" to mean "employing a proxy," or making use of a proxy. Thus, the claimed limitation clearly reads on how connection service provider manager 214 causes connection service provider modules 220 to establish a connection to the destination network. For example, if the most appropriate connection method is determined to be

through a proxy server, then proxy 225, or "dynamic proxy component," may cause a connection to be established via an "inserted" or employed proxy server. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Shaffer to incorporate a dynamic proxy component that is employed to dynamically insert a proxy based on a determination, as taught by Shell, for the purpose of increasing the functionality and versatility of the proxy media service system of Shaffer, and since Shaffer identically discloses a proxy media service 220 as disclosed in Paragraph 0080 and Figure 5. The combination of Shaffer and Shell does not teach "trusted endpoint identity." However, Park teaches "trusted endpoint identity" (see Paragraph 0050, 0058, and Figure 5). The claimed limitation clearly reads on pre-setting trusted devices whose authentication may be used for granting access, as disclosed in Paragraph 0058. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination to include trusted endpoint identity as taught by Park, for the purpose of enhancing the security, functionality, and versatility of the system for providing a proxy media service of Shaffer when an originating endpoint tries to gain access through a VTG, and since both Shaffer and Park identically disclose PTT communications as disclosed in Paragraph 0050 of Park and Paragraph 0058 of Shaffer.

Regarding **Claim 2**, Shaffer teaches "wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams" (see Paragraph 0063). The claimed

limitation clearly reads on the floor control denial signal if endpoint 90, for example, has the floor.

Regarding **Claim 3**, Shaffer teaches "further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization" (see Paragraph 0064-0065). The claimed limitation clearly reads on how IS 100 "optimizes resource utilization" by preventing certain endpoints from controlling the floor for extended amounts of time.

Regarding **Claim 7**, Shaffer teaches "an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis" (see Paragraphs 0053-0054, 0058, 0063, and Figure 3). The claimed limitation reads on full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" by IS 100.

Regarding **Claim 15**, Shaffer teaches "wherein one or more disparate endpoints identify the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint" (see Paragraph 0063). The claimed limitation reads on full-duplex endpoint 80 receiving a floor control denial signal, which is indicative of endpoint 80 "non-conforming with the floor control mechanism based in part on monitoring the endpoint."

Regarding **Claim 16**, Shaffer teaches "wherein an entity is conforming with the floor control mechanism if it adheres to predefined quality of service and rules of transmission" (see Paragraphs 0053-0054, 0058, 0063, 0065, 0077, 0090, and Figures

3 and 5). Park teaches "trusted endpoint identity" (see Paragraph 0050, 0058, and Figure 5).

Regarding **Claim 10**, Shaffer teaches "wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" (see Paragraph 0065). The claimed limitation reads on the priority of the VTG being changed based on an event associated with the VTG.

Regarding **Claim 11**, Shell teaches "wherein the dynamic proxy component dynamically establishes a communication path between an endpoint and one or more disparate endpoints" (see Paragraph 0090 and Figures 1-3). The claimed limitation clearly reads on how proxy 225 may cause a connection to be established to a proxy server. Shaffer teaches "based in part on the analysis" (see Paragraphs 0053-0054, 0058, and Figure 3).

Regarding **Claim 12**, Shaffer teaches "a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG" (see Paragraph 0058 and 0063). "Media capabilities of the endpoint" clearly reads on the full duplex endpoint 80, and the "determination" clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" by IS 100.

Regarding **Claim 14**, Shaffer teaches "identifying at least one of media capability information or identity information associated with the endpoint" (see Paragraph 0061).

"Identity information associated with the endpoint" clearly reads on recognizing that endpoint 80 is connected via a full duplex connection.

Regarding **Claim 19**, Shaffer teaches "means for dynamically establishing a communication path between the devices based in part on the analysis" (see Paragraphs 0053-0054 and 0058). The claimed limitation reads on granting floor control to endpoint 80.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Shell and Park, as applied to Claims 1 and 4-5, and further in view of Grealish et al, US 2009/0093235 A1 (hereafter referenced as Grealish).

Regarding **Claim 4**, the combination of Shaffer and Shell and Park does not teach "an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint." However, Grealish teaches "an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint" (see Paragraphs 0031 and 0035). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination to include an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint as taught by Grealish, for the purpose of enhancing the functionality and versatility of IS 100 when acting as an intermediary between half duplex endpoints 90 and full duplex endpoint 80, which are part of different communication networks and are non-compatible communication devices.

Regarding **Claim 5**, the combination of Shaffer, Shell, Park, and Grealish teaches "wherein the identity collection component employs credentials resident on the endpoint" (see Paragraphs 0031 and 0035 of Grealish). The claimed limitation clearly reads on the make, model, and device features, including data storage capabilities of the "endpoint."

Regarding **Claim 6**, the combination of Shaffer, Shell, Park, and Grealish teaches "security risk associated with the endpoint" (see Paragraph 0031 and 0035 of Grealish). The combination also teaches "transmitting into a given VTG without adhering with the floor control policy of the system" (see Paragraph 0066 of Shaffer). The claimed limitation clearly reads on how full duplex endpoint 80 may not understand or otherwise be capable of communication with the VTG.

Response to Arguments

Applicant's arguments filed on 1/4/2013 have been fully considered but are still found to be unpersuasive.

The Examiner firmly submits that in response to pages 6-9 of the Remarks, Shaffer teaches "receiving information associated with an endpoint" (see Paragraphs 0053-0054, 0058, and Figure 3). Shaffer teaches "an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism" (see Paragraphs 0053-0054, 0058, 0063 and Figure 3). The

claimed limitation clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is “determined” and "analyzed" by IS 100. Shaffer also teaches “when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism” (see Paragraphs 0053-0054, 0058, 0063 and Figure 3). The claimed limitation clearly reads on the full-duplex endpoint 80 not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is “determined” and "analyzed" by IS 100. Shaffer also teaches “capabilities of the predefined floor control mechanism, the capabilities comprising quality of service and rules of transmission” (see Paragraph 0065, 0077, 0090, Figure 3, and Figure 5). With respect to “quality of service” according to Paragraph 0090, the Examiner firmly submits that this claimed feature reads on endpoint 203 monitoring bandwidth and determining whether to send a user communication to each of a user-selected number of VTG streams or whether to send separate streams for transmission to each of the user-selected number of VTG streams, where this determination may be based on whether transmission over WAN 208 can be accomplished at a specified or appropriate quality level. In support, according to Paragraph 0077, Interoperability Server 210 may be similar to Interoperability Server 50 and may enable interoperable VTG communications among endpoints of different communication networks. With respect to “rules of transmission," according to Paragraph 0065, this claimed feature clearly reads on how Interoperability Server 100 may have a policy that determines the maximum amount of time that a particular user

may control the floor based on priority for example. Shaffer does not teach “a dynamic proxy component that is employed to dynamically insert a proxy based on a determination.” However, Shell teaches “a dynamic proxy component that is employed to dynamically insert a proxy based on a determination” (see Paragraph 0090 and Figures 1-3). The Examiner would like to submit on record that according to Applicant's Remarks on the 1st page, Applicant admits on record that step 714 of Figure 7 of Applicant’s specification is equivalent to “dynamically inserting a proxy" as claimed. In addition, even though Applicant’s specification may use the phrase “inserting a proxy” in various instances, the Examiner firmly submits that this is no different than "employing a dynamic proxy," where “employing” means to use or make use of to one of ordinary skill in the art. Thus, taking into consideration Paragraph 0056 of Applicant’s specification which clearly discloses that “at 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG,” and taking into consideration Applicant's admission that this recitation of Paragraph 0056 is equivalent to the claimed "inserting a proxy,” the Examiner is construing the claimed "inserting a proxy" to mean "employing a proxy," or making use of a proxy. Thus, the claimed limitation clearly reads on how connection service provider manager 214 causes connection service provider modules 220 to establish a connection to the destination network. For example, if the most appropriate connection method is determined to be through a proxy server, then proxy 225, or “dynamic proxy component,” may cause a connection to be established via an “inserted” or employed proxy server. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Shaffer to incorporate a dynamic proxy

component that is employed to dynamically insert a proxy based on a determination, as taught by Shell, for the purpose of increasing the functionality and versatility of the proxy media service system of Shaffer, and since Shaffer identically discloses a proxy media service 220 as disclosed in Paragraph 0080 and Figure 5. The combination of Shaffer and Shell does not teach "trusted endpoint identity." However, Park teaches "trusted endpoint identity" (see Paragraph 0050, 0058, and Figure 5). The claimed limitation clearly reads on pre-setting trusted devices whose authentication may be used for granting access, as disclosed in Paragraph 0058. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination to include trusted endpoint identity as taught by Park, for the purpose of enhancing the security, functionality, and versatility of the system for providing a proxy media service of Shaffer when an originating endpoint tries to gain access through a VTG, and since both Shaffer and Park identically disclose PTT communications as disclosed in Paragraph 0050 of Park and Paragraph 0058 of Shaffer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANKUR JAIN whose telephone number is (571)272-9747. The examiner can normally be reached on M-F, 9:00 am to 4:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANKUR JAIN can be reached on (571)272-9747. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ankur Jain/

Examiner, Art Unit 2649

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	**Art Unit**
	ANKUR JAIN	2618

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	02/03/2012	10/06/2012	03/09/2013						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	✓	✓						
	6	✓	✓	✓						
	7	✓	✓	✓						
	8	✓	✓	-						
	9	✓	✓	-						
	10	✓	✓	✓						
	11	✓	✓	✓						
	12	✓	✓	✓						
	13	✓	✓	✓						
	14	✓	✓	✓						
	15	✓	✓	✓						
	16	✓	✓	✓						
	17	✓	✓	✓						
	18	✓	✓	-						
	19	✓	✓	✓						
	20	N	-	-						
	21	N	-	-						
	22	N	-	-						
	23	N	-	-						
	24	N	-	-						
	25	N	-	-						
	26	N	-	-						
	27	N	-	-						

REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provides for continued examination of an utility or plant application filed on or after June 8, 1995. See The American Inventors Protection Act of 1999 (AIPA).		
	Application Number	12/127,397
	Filing Date	May 27, 2008
	First Named Inventor	Shmuel Shaffer
	Confirmation Number	8388
	Group Art Unit	2649
	Examiner Name	Ankur Jain
	Attorney Docket Number	1370.356US1
	Customer No.	21123

This is a Request for Continued Examination (RCE) under 37 C.F.R § 1.114 of the above-identified application entitled
INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

1. Submission required under 37 C.F.R. § 1.114:

   X Amendment and Response Under 37 C.F.R § 1.116 (9 pages) is enclosed.

2. Fees

   X Authorization to charge deposit account 19-0743 in the amount of $930.00 to pay the RCE filing fee required under 37 C.F.R. § 1.17(e).

The Commissioner is hereby authorized to charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG & WOESSNER, P.A. By: /Marc Hanish/

Marc S. Hanish
Reg. No. 42,626

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 4th day of January, 2013.

Laura Johnson — Name

/Laura Johnson/ — Signature

EXPEDITED PROCEDURE-EXAMINING GROUP 2649

S/N 12/127,397 **PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Shmuel Shaffer et al.	Examiner: Ankur Jain	
Serial No.:	12/127,397	Group Art Unit: 2649	
Filed:	May 27, 2008	Docket No.: 1370.356US1	
Customer No.:	21123	Confirmation No.: 8388	
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		

AMENDMENT & RESPONSE UNDER 37 C.F.R. 1.116

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In response to the Final Office Action dated October 17, 2012, please amend the application as follows:

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An apparatus, comprising:

an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism; and

a dynamic proxy component that is employed to dynamically **insert a** proxy **that adheres to the predefined floor control mechanism when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism,** ~~the endpoint based on the determination and to allow the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG,~~ the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity.

2. (Original) The apparatus of claim 1, wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams.

3. (Original) The apparatus of claim 1, further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization.

4. (Original) The apparatus of claim 1, further comprising an identity collection component that receives an identity of the endpoint to assess a security risk associated with the endpoint.

5. (Original) The apparatus of claim 4 wherein the identity collection component employs credentials resident on the endpoint.

6. (Original) The apparatus of claim 5, wherein the security risk associated with the endpoint is that the endpoint transmits into a given VTG without adhering with the floor control policy of the system.

7. (Original) The apparatus of claim 1, further comprising an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis.

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) The apparatus of claim 1 [[8]] wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG.

11. (Original) The apparatus of claim 1, wherein the dynamic proxy component dynamically establishes a communication path between the endpoint and one or more disparate endpoints based in part on the analysis.

12. (Original) The apparatus of claim 1, further comprising a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG.

13. (Currently Amended) A method, comprising:

receiving information associated with an endpoint;

identifying information associated with ~~the~~ adherence of the endpoint with a predefined floor control mechanism;

analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism

~~**allowing the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity**~~.

14. (Original) The method of claim 13, further comprising identifying at least one of media capability information or identity information associated with the endpoint.

15. (Original) The method of claim 13, further comprising identifying the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

16. (Currently Amended) The method of claim 15, **wherein an entity is conforming with the floor control mechanism if it adheres to predefined quality of service, rules of transmission, and trusted endpoint identity** ~~**further comprising dynamically inserting a proxy between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism**~~.

17. (Currently Amended) A system, comprising:

means for receiving information associated with an endpoint;

means for identifying information associated with ~~the~~ adherence of the endpoint with a predefined floor control mechanism;

means for analyzing the identified information to evaluate if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

means for **dynamically inserting a proxy between the endpoint and the VTG when the endpoint is identified as non-conforming with the floor control mechanism, the proxy being conforming with the floor control mechanism** ~~directly connecting the endpoint with the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity~~.

18. (Cancelled)

19. (Original) The system of claim 17, further comprising means for dynamically establishing a communication path between the devices based in part on the analysis.

20-27. (Canceled)

REMARKS

This responds to the Final Office Action dated October 17, 2012.

Claims 1, 10, 13, 16, and 17 are amended, and claims 8, 9 and 18 are canceled; as a result, claims 1-7, 10-17, and 19 are now pending in this application.

Interview Summary

Applicants thank Examiner Ankur Jain for the courtesy of a telephone interview on December 27, 2012 with Applicants' representative Marc S. Hanish. During the interview, a proposed amendment was discussed. The Examiner indicated that the proposed amendment would move the case forward and that a new search would be required. The Examiner also requested that specific support for the amendments be described. Applicants agreed.

Applicants first refer to paragraph [0056] of the specification. This paragraph describes how a determination can be made at 710 as to whether the device should be joined via proxy, based on the media capabilities of the device and available system resources. The paragraph goes on to describe these capabilities as whether "the device can adhere to the behavioral characteristics of an interoperability system, such as but not limited to, transmission rules." The paragraph also goes on to describe how the proxy is dynamically inserted at 714. Paragraph [0056] also describes how a decision is also based on identity of the endpoint.

Paragraph [0039] describes how the capabilities of the endpoint being analyzed by the analysis component can involve a determination of whether "the endpoint can provide the quality of service required in the VTG."

The Rejection of Claims Under § 103

Claims 1-3 and 7-19 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaffer et al. (U.S. Publication No. 2007/0105579 A1; hereafter referred to as "Shaffer"), in view of Shell et al. (U.S. Publication No. 2004/0224668 A1; hereafter referred to as "Shell"), and further in view of Parkkinen et al. (U.S. Publication No. 2011/0004636 A1; hereafter referred to as "Parkkinen").

Claims 4-6 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaffer in view of Shell and Parkkinen, and further in view of Grealish et al. (U.S. Publication No. 2009/0093235 A1; hereafter referred to as "Grealish").

The claims have been amended in a manner that Applicants respectfully submit renders the rejection moot. Specifically, the claims now recite that a proxy is dynamically inserted when the determination by the analysis component concludes that the endpoint is not in adherence with capabilities of the predefined floor control mechanism. There is no such dynamic insertion of a proxy in any of the prior art references. Shaffer discloses a proxy media service (PMS), but this is present all the time, and handles communication with both endpoints in adherence with the floor control mechanism (full duplex) and endpoints not in adherence (half duplex). This is depicted as PMS 220 in FIG. 5, reproduced below.

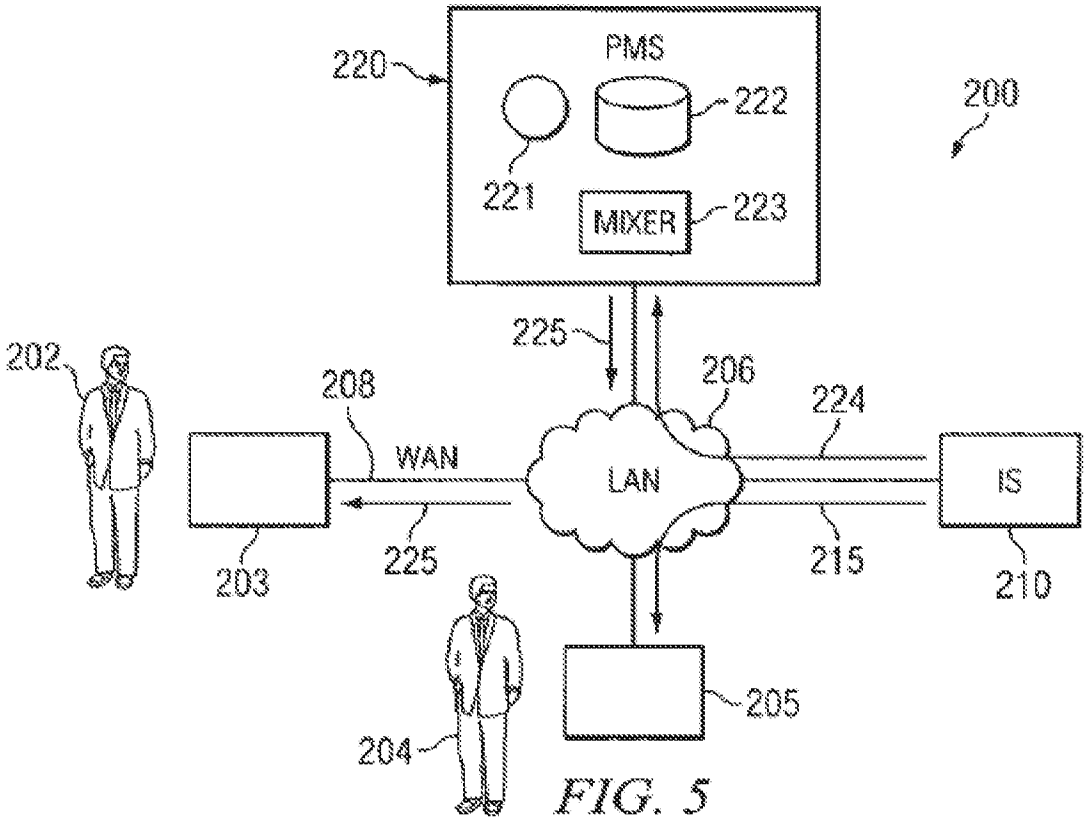


FIG. 5

There is nothing dynamic about the use of this proxy; it is simply used all the time.

Shell discloses a generic proxy server, but again there is nothing suggesting that this proxy server is dynamically inserted, as opposed to simply always being present, let alone specifically being dynamically inserted when an endpoint is determined to not be in adherence with a floor control mechanism.

Parrkkinen fails to disclose a proxy at all.

Furthermore, claim 1 as amended makes clear that the decision to dynamically insert the proxy is based on capabilities of an endpoint that include at least quality of service, rules transmission, and endpoint identity. The Examiner has provided arguments and references allegedly showing that a system can make a determination as to whether or not to accept an endpoint into a group based on capabilities such as quality of service, rules of transmission, and endpoint identity, but this is irrelevant to whether or not the references teach dynamically inserting a proxy based on these capabilities. Allowing somebody to enter a vault based on whether the person can utter a password is completely different than dynamically creating a whole different person to enter the vault when the person cannot enter a password. Likewise, allowing an endpoint to access a group based on certain capabilities is completely different than deciding to dynamically insert a proxy to access the group when the endpoint fails to have those capabilities.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' representative at (408) 278-4056 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402--0938
(408) 278-4056

Date 1/4/13

By /Marc Hanish/
Marc S. Hanish
Reg. No. 42,626

Electronic Patent Application Fee Transmittal

Application Number:	12127397
Filing Date:	27-May-2008
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Filer:	Alison Nemier Sachs/Laura Johnson
Attorney Docket Number:	1370.356US1

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Request for continued examination	1801	1	930	930
		Total in USD ($)		**930**

Electronic Acknowledgement Receipt

EFS ID:	14623257
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	21186
Filer:	Alison Nemier Sachs/Laura Johnson
Filer Authorized By:	Alison Nemier Sachs
Attorney Docket Number:	1370.356US1
Receipt Date:	04-JAN-2013
Filing Date:	27-MAY-2008
Time Stamp:	18:54:11
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$930
RAM confirmation Number	5529
Deposit Account	190743
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		1370_356US1_RCE.pdf	176617 95ed914d8211bf479519bb2d1e3b5d58370129ab	yes	10

Multipart Description/PDF files in .zip description

Document Description	Start	End
Request for Continued Examination (RCE)	1	1
Amendment Submitted/Entered with Filing of CPA/RCE	2	2
Claims	3	6
Applicant Arguments/Remarks Made in an Amendment	7	10

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	30569 5e63b2948caf932189832b0ba5a9ba2f1b07552f	no	2

Warnings:

Information:

Total Files Size (in bytes):	207186

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
12/127,397	05/27/2008	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 01/04/2013	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 16	Minus	** 27	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	* 4	Minus	***5	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

AMENDMENT	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/JACQUELINE WEIR/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 01/03/2013

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	
ART UNIT	**PAPER NUMBER**
2649	

NOTIFICATION DATE	DELIVERY MODE
01/03/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
SLW@blackhillsip.com

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	12/127,397	SHAFFER ET AL.	
	Examiner	Art Unit	
	ANKUR JAIN	2649	

All participants (applicant, applicant's representative, PTO personnel):

(1) *ANKUR JAIN*. (3)_____.

(2) *Marc Hanish*. (4)_____.

Date of Interview: *27 December 2012*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *See Final Rejection*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Applicant and Examiner discussed the proposed amendments. The amendments appear to overcome the references of record, however an updated search will need to be performed. Applicant commented that a RCE will need to be filed. Furthermore, the Examiner submits that 112 Written Description must be taken into account before filing the proposal as discussed as well.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

	/Yuwen Pan/ Supervisory Patent Examiner, Art Unit 2649

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 10/17/2012

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	
ART UNIT	**PAPER NUMBER**
2649	

NOTIFICATION DATE	DELIVERY MODE
10/17/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
SLW@blackhillsip.com

Office Action Summary	Application No.	Applicant(s)	
	12/127,397	SHAFFER ET AL.	
	Examiner	Art Unit	
	ANKUR JAIN	2649	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 June 2012*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-19* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-19* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al, US 2007/0105579 A1 (hereafter referenced as Shaffer), in view of Shell et al, US 2004/0224668 A1 (hereafter referenced as Shell), and further in view of Parkkinen et al, US 2011/0004636 A1 (hereafter referenced as Park).

Regarding **Claim 1, 13, and 17**, Shaffer teaches "receiving information associated with an endpoint" (see Paragraphs 0053-0054, 0058, and Figure 3). Shaffer teaches "an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism" (see Paragraphs 0053-0054, 0058, 0063 and Figure 3). The claimed limitation clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" and "analyzed" by IS 100. Shaffer also teaches "allowing the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the

capabilities comprising quality of service and rules of transmission" (see Paragraph 0065, 0077, 0090, Figure 3, and Figure 5). With respect to "allowing the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising quality of service" according to Paragraph 0090, the Examiner firmly submits that this claimed feature reads on endpoint 203 monitoring bandwidth and determining whether to send a user communication to each of a user-selected number of VTG streams or whether to send separate streams for transmission to each of the user-selected number of VTG streams, where this determination may be based on whether transmission over WAN 208 can be accomplished at a specified or appropriate quality level. In support, according to Paragraph 0077, Interoperability Server 210 may be similar to Interoperability Server 50 and may enable interoperable VTG communications among endpoints of different communication networks. With respect to "allowing the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising rules of transmission," according to Paragraph 0065, this claimed feature clearly reads on how Interoperability Server 100 may have a policy that determines the maximum amount of time that a particular user may control the floor based on priority for example. Shaffer does not teach "a dynamic proxy component that is employed to dynamically proxy an endpoint based on a determination." However, Shell teaches "a dynamic proxy component that is employed to dynamically proxy an endpoint based on a determination" (see Paragraph 0090 and Figures 1-3). The claimed limitation clearly reads on how proxy 225 may cause a connection to be

established to a proxy server. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Shaffer to incorporate a dynamic proxy component that is employed to dynamically proxy an endpoint based on a determination as taught by Shell, for the purpose of increasing the functionality and versatility of the proxy media service system of Shaffer, and since Shaffer identically discloses a proxy media service 220 as disclosed in Paragraph 0080 and Figure 5. The combination of Shaffer and Shell does not teach "trusted endpoint identity." However, Park teaches "trusted endpoint identity" (see Paragraph 0050, 0058, and Figure 5). The claimed limitation clearly reads on pre-setting trusted devices whose authentication may be used for granting access, as disclosed in Paragraph 0058. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination to include trusted endpoint identity as taught by Park, for the purpose of enhancing the security, functionality, and versatility of the system for providing a proxy media service of Shaffer when an originating endpoint tries to gain access through a VTG, and since both Shaffer and Park identically disclose PTT communications as disclosed in Paragraph 0050 of Park and Paragraph 0058 of Shaffer.

Regarding **Claim 2**, Shaffer teaches "wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams" (see Paragraph 0063). The claimed limitation clearly reads on the floor control denial signal if endpoint 90, for example, has the floor.

Regarding **Claim 3**, Shaffer teaches "further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization" (see Paragraph 0064-0065). The claimed limitation clearly reads on how IS 100 "optimizes resource utilization" by preventing certain endpoints from controlling the floor for extended amounts of time.

Regarding **Claim 7**, Shaffer teaches "an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis" (see Paragraphs 0053-0054, 0058, 0063, and Figure 3). The claimed limitation reads on full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" by IS 100.

Regarding **Claim 8 and Claim 15**, Shaffer teaches "wherein one or more disparate endpoints identify the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint" (see Paragraph 0063). The claimed limitation reads on full-duplex endpoint 80 receiving a floor control denial signal, which is indicative of endpoint 80 "non-conforming with the floor control mechanism based in part on monitoring the endpoint."

Regarding **Claim 9 and Claim 16 and Claim 18**, Shell teaches "wherein a proxy is dynamically inserted" (see Paragraph 0090 and Figures 1-3). Shaffer teaches "between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism" (see Paragraphs 0053-0054, 0058, 0063, and Figure 3). The claimed limitation reads on full-duplex endpoint 80 receiving a floor control denial

signal, which is indicative of endpoint 80 "non-conforming with the floor control mechanism."

Regarding **Claim 10**, Shaffer teaches "wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" (see Paragraph 0065). The claimed limitation reads on the priority of the VTG being changed based on an event associated with the VTG.

Regarding **Claim 11**, Shell teaches "wherein the dynamic proxy component dynamically establishes a communication path between an endpoint and one or more disparate endpoints" (see Paragraph 0090 and Figures 1-3). The claimed limitation clearly reads on how proxy 225 may cause a connection to be established to a proxy server. Shaffer teaches "based in part on the analysis" (see Paragraphs 0053-0054, 0058, and Figure 3).

Regarding **Claim 12**, Shaffer teaches "a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG" (see Paragraph 0058 and 0063). "Media capabilities of the endpoint" clearly reads on the full duplex endpoint 80, and the "determination" clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" by IS 100.

Regarding **Claim 14**, Shaffer teaches "identifying at least one of media capability information or identity information associated with the endpoint" (see Paragraph 0061).

"Identity information associated with the endpoint" clearly reads on recognizing that endpoint 80 is connected via a full duplex connection.

Regarding **Claim 19**, Shaffer teaches "means for dynamically establishing a communication path between the devices based in part on the analysis" (see Paragraphs 0053-0054 and 0058). The claimed limitation reads on granting floor control to endpoint 80.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Shell and Park, as applied to Claims 1 and 4-5, and further in view of Grealish et al, US 2009/0093235 A1 (hereafter referenced as Grealish).

Regarding **Claim 4**, the combination of Shaffer and Shell and Park does not teach "an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint." However, Grealish teaches "an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint" (see Paragraphs 0031 and 0035). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination to include an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint as taught by Grealish, for the purpose of enhancing the functionality and versatility of IS 100 when acting as an intermediary between half duplex endpoints 90 and full duplex endpoint 80, which are part of different communication networks and are non-compatible communication devices.

Regarding **Claim 5**, the combination of Shaffer, Shell, Park, and Grealish teaches "wherein the identity collection component employs credentials resident on the endpoint" (see Paragraphs 0031 and 0035 of Grealish). The claimed limitation clearly reads on the make, model, and device features, including data storage capabilities of the "endpoint."

Regarding **Claim 6**, the combination of Shaffer, Shell, Park, and Grealish teaches "security risk associated with the endpoint" (see Paragraph 0031 and 0035 of Grealish). The combination also teaches "transmitting into a given VTG without adhering with the floor control policy of the system" (see Paragraph 0066 of Shaffer). The claimed limitation clearly reads on how full duplex endpoint 80 may not understand or otherwise be capable of communication with the VTG.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANKUR JAIN whose telephone number is (571)272-9747. The examiner can normally be reached on M-F, 9:00 am to 4:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ankur Jain/
Examiner, Art Unit 2649

/DUC NGUYEN/
Supervisory Patent Examiner, Art Unit 2649

Notice of References Cited	Application/Control No. 12/127,397	Applicant(s)/Patent Under Reexamination SHAFFER ET AL.	
	Examiner ANKUR JAIN	Art Unit 2649	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2011/0004636	01-2011	Parkkinen et al.	707/803
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"20070105579"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 12:34
L2	1	12/127397.APP.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:03
L3	1	12/127397.APP. AND (rule$2 near3 transmission$2)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:04
L4	0	(allow$4 near6 ((floor near3 control$4) or (talk near3 group) or (talk ADJ group$2))) WITH (qualit$4 AND trust$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:13
L5	0	(allow$4 near6 ((floor near3 control$4) or (talk near3 group) or (talk ADJ group$2))) WITH (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:14
L6	0	(floor near3 control$4) near7 (based or according$4) near7 ((qualit$4) AND trust$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:16
L7	3	(floor near3 control$4) near7 (based or according$4) near7 (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:16
L8	146	(floor near3 control$4) WITH (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:17
L9	0	(floor near3 control$4) WITH ((qualit$4) AND trust$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:18
L10	343	(floor near3 control$4) WITH (secur$5 or trust$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:18
L11	0	(floor near3 control$4) WITH (trust$4 ADJ (endpoint$2 or user$4 or client or device$2))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:19
L12	43	L8 AND ("455".CLAS. or "370".CLAS.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:20

L13	0	((gain$4 or start$4 or begin$6 or allow$6 or initiat$6) near5 (floor near3 control$4)) WITH (qualit$4)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:23
L14	703	((gain$4 or start$4 or begin$6 or allow$6 or initiat$6) near5 (floor near3 control$4))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:23
L15	0	(floor near4 control$6) SAME ((monitor$4 or check$4 or determin$6 or ascertain$4 or assess$6 or evaluat$6) near7 (qualit$4 near3 servic$4))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:28
L16	48	(floor near4 control$6) AND ((monitor$4 or check$4 or determin$6 or ascertain$4 or assess$6 or evaluat$6) near7 (qualit$4 near3 servic$4))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:29
L17	4	(floor near4 control$6) AND ((conform$4 or comply$4) near6 (qualit$4 near3 servic$4))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:43
L18	2	"20070105579" AND quality	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:49
L19	5	(US-20040224668-$ or US-20070105579-$ or US-20090093235-$ or US-20070127374-$ or US-20060223519-$).did.	US-PGPUB	OR	ON	2012/10/06 13:58
L20	0	L19 AND trust$5	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:59
L21	2	(trust$4 ADJ endpoint$3 ADJ identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 13:59
L22	98	(trust$4 ADJ endpoint$3)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 14:00
L23	2	L22 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 14:00
L24	1	(trust$4) WITH ((floor near3 control$4) or (talk ADJ group$4) or (talk near3 group$2))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 14:02
L25	25	(trust$4 ADJ (client$4 or endpoint$2 or user$4 or device$2)) AND ((floor near3 control$4) or (talk ADJ group$4) or (talk near3 group$2))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/10/06 14:03
S1	591	((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 (insert$5 or attach$5 or connect$6) near5 (proxy))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:42
S2	43	S1 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2012/02/03 11:43

			IBM_TDB			
S3	504	((SHMUEL) near2 (SHAFFER)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:45
S4	15	((AMIT) near2 (BARAVE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:45
S5	57	((STEVEN) near2 (CHRISTENSON)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:46
S6	33	((MARCELO) near2 (OLIVEIRA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:46
S7	557	S3 or S4 or S5 or S6	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:46
S8	1	S7 AND (VTG AND proxy AND floor).CLM.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:47
S9	2	("20070105579" | "20070270172").PN.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 12:13
S10	0	(security ADJ risk$2) WITH PTT WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
S11	0	(security ADJ risk$2) SAME PTT SAME ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
S12	0	(security) SAME PTT SAME ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
S13	0	(security) SAME ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5) SAME VTG	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
S14	1110	(security) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:31
S15	17	(security near4 risk$2) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:31
S16	1110	(security) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:34
S17	1	S16 AND 455/517-519.CCLS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:35
S18	65	S16 AND "455".CLAS.	US-PGPUB;	OR	ON	2012/02/03

			USPAT; EPO; JPO; IBM_TDB			13:35
S19	1	12/127397.APP. AND (alter$4 WITH conceal$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:25
S20	2	(alter$4 near5 parameters near5 group) AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:32
S21	321	(alter$6 or updat$5 or modif$7 or chang$5 or switch$4 or transform$6) near6 parameter$4 near6 (conceal$6 or hid$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:45
S22	8	S21 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:45

10/6/2012 3:05:38 PM
C:\Users\ajain1\Documents\EAST\Workspaces\12127397.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	Art Unit
	ANKUR JAIN	2618

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	02/03/2012	10/06/2012							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
	8	✓	✓							
	9	✓	✓							
	10	✓	✓							
	11	✓	✓							
	12	✓	✓							
	13	✓	✓							
	14	✓	✓							
	15	✓	✓							
	16	✓	✓							
	17	✓	✓							
	18	✓	✓							
	19	✓	✓							
	20	N	-							
	21	N	-							
	22	N	-							
	23	N	-							
	24	N	-							
	25	N	-							
	26	N	-							
	27	N	-							

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 06/29/2012

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	

ART UNIT	PAPER NUMBER
2618	

NOTIFICATION DATE	DELIVERY MODE
06/29/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
SLW@blackhillsip.com

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	12/127,397	SHAFFER ET AL.	
	Examiner	Art Unit	
	ANKUR JAIN	2618	

All participants (applicant, applicant's representative, PTO personnel):

(1) *ANKUR JAIN*. (3)_____.

(2) *Thierry Lo*. (4)_____.

Date of Interview: *20 June 2012*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *Independent claims*.

Identification of prior art discussed: *See Non-Final Rejection*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

No agreement was reached. Examiner will perform an updated search and also reconsider the references of record when considering the claim amendments.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/DUC NGUYEN/
Supervisory Patent Examiner, Art Unit 2618

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Shmuel Shaffer et al.	Examiner: Ankur Jain	
Serial No.:	12/127,397	Group Art Unit: 2616	
Filed:	May 27, 2008	Docket No.: 1370.356US1	
Customer No.:	21186	Confirmation No.: 8388	
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		

AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.111

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In response to the Office Action dated February 9, 2012, please amend the application as follows:

This response is accompanied by a Petition, as well as the appropriate fee, to obtain a one-month extension of the period for responding to the Office action, thereby moving the deadline for response from May 9, 2012 to June 9, 2012 (Saturday).

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) An apparatus, comprising:

an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism; and

a dynamic proxy component that is employed to dynamically proxy the endpoint based on the determination and to allow the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity.

2. (Original) The apparatus of claim 1, wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams.

3. (Original) The apparatus of claim 1, further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization.

4. (Original) The apparatus of claim 1, further comprising an identity collection component that receives an identity of the endpoint to assess a security risk associated with the endpoint.

5. (Original) The apparatus of claim 4 wherein the identity collection component employs credentials resident on the endpoint.

6. (Original) The apparatus of claim 5, wherein the security risk associated with the endpoint is that the endpoint transmits into a given VTG without adhering with the floor control policy of the system.

7. (Original) The apparatus of claim 1, further comprising an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis.

8. (Original) The apparatus of claim 1 wherein one or more disparate endpoints identify the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

9. (Original) The apparatus of claim 8, wherein a proxy is dynamically inserted between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism.

10. (Original) The apparatus of claim 8 wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG.

11. (Original) The apparatus of claim 1, wherein the dynamic proxy component dynamically establishes a communication path between the endpoint and one or more disparate endpoints based in part on the analysis.

12. (Original) The apparatus of claim 1, further comprising a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG.

13. (Currently amended) A method, comprising:

receiving information associated with an endpoint;

identifying information associated with the adherence of the endpoint with a predefined floor control mechanism; ~~and~~

analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

allowing the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity.

14. (Original) The method of claim 13, further comprising identifying at least one of media capability information or identity information associated with the endpoint.

15. (Original) The method of claim 13, further comprising identifying the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

16. (Original) The method of claim15, further comprising dynamically inserting a proxy between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism.

17. (Currently amended) A system, comprising:

means for receiving information associated with an endpoint;

means for identifying information associated with the adherence of the endpoint with a predefined floor control mechanism; ~~and~~

means for analyzing the identified information to evaluate if the endpoint should be connected to a virtual talk group (VTG) via a proxy; and

means for directly connecting the endpoint with the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity.

18. (Original) The system of claim 17, further comprising means for dynamically inserting a proxy between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism.

19. (Original) The system of claim 17, further comprising means for dynamically establishing a communication path between the devices based in part on the analysis.

20-27. (Canceled)

REMARKS

This responds to the Office Action dated February 9, 2012.

Claims 1, 13, and 17 are amended, and claims 20-27 have been canceled; as a result, claims 1-19 are now pending in this application. Amendments to the claims are supported by the originally filed specification, for example, at Paragraphs [0039], and [0042].

Affirmation of Election

Applicants elect to prosecute the invention of Group I, claims 1-19, without traverse. The claims of the non-elected invention, claims 20-27, are hereby canceled. However, Applicant reserves the right to later file continuations or divisions having claims directed to the non-elected inventions.

The Rejection of Claims Under § 103

Claims 1-3 and 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al, US 2007/0105579 A1 (hereafter referenced as Shaffer), in view of Shell et al, US 2004/0224668 A1 (hereafter referenced as Shell).

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Shell, as applied to Claims 1 and 4-5, and further in view of Grealish et al, US 2009/0093235 A1 (hereafter referenced as Grealish).

Shaffer describes a push-to-talk proxy media service. In particular, the method allows full duplex endpoint to communicate with half-duplex endpoint via an interoperability system IS 20. Fig. 3 of Shaffer. As pointed by the Office Action, Shaffer does not teach or suggest "a dynamic proxy component that is employed to dynamically proxy the endpoint based on the determination" as recited in claim 1 and similarly in claims 13 and 17. The Office Action relies on the teachings of Shell to overcome the deficiencies of Shaffer.

Shell describes that "if the most appropriate connection method is determined to be through a proxy server, proxy **225** may cause a connection to be established to the proxy server."

Paragraph [0090] of Shell. Shell describes a connection manager that identifies the most appropriate connection method from among available connection methods. See Paragraph [0016] of Shell. "This may include the connection manager causing the establishment of a *dial-up connection*, *hardwired network connection*, *wireless network connection*…" (emphasis added) See Paragraph [0020] of Shell.

Applicants respectfully submit that the proposed combined teachings of Shaffer and Shell do not suggest "a dynamic proxy component that is employed to dynamically proxy the endpoint based on the determination and *to allow the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity*" (emphasis added) as recited in part in claims 1, 13, and 17. In particular, Shaffer, Shell, and Grealish do not suggest "*allow the endpoint to directly join the VTG when capabilities of the endpoint conform to an interoperability server of the VTG, the capabilities comprising quality of service, rules of transmission, and trusted endpoint identity*."

Applicants respectfully request that the present rejection of Claims 1, 13, and 17 and their respective dependent claims be withdrawn for at least the reasons previously set forth.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (949) 354-0200 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402--0938
(949) 354-0200

Date June 11, 2012

By /Thierry/
Thierry Lo
Reg. No. 49,097

Electronic Patent Application Fee Transmittal

Application Number:	12127397
Filing Date:	27-May-2008
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Filer:	James Lee Shands/Chris Bartl
Attorney Docket Number:	1370.356US1

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 1 month with $0 paid	1251	1	150	150

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	**150**

Electronic Acknowledgement Receipt

EFS ID:	12985467
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	21186
Filer:	James Lee Shands/Chris Bartl
Filer Authorized By:	James Lee Shands
Attorney Docket Number:	1370.356US1
Receipt Date:	11-JUN-2012
Filing Date:	27-MAY-2008
Time Stamp:	17:54:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$150
RAM confirmation Number	5266
Deposit Account	190743
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)	
Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)	
Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		1370356US1-OA-RESP-06-11-12.pdf	162346 96d688e119774c6ad6fabdf379ba0203b055e5f5	yes	10

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Miscellaneous Incoming Letter	1	1
	Extension of Time	2	2
	Amendment/Req. Reconsideration-After Non-Final Reject	3	3
	Claims	4	7
	Applicant Arguments/Remarks Made in an Amendment	8	10

Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30605 74cb1bdcd440310326879e7f783085b7adcb792e	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	192951		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Shmuel Shaffer et al.

Title: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Docket No.:	1370.356US1	Serial No.:	12/127,397
Filed:	May 27, 2008	Due Date:	June 9, 2012
Examiner:	Ankur Jain	Group Art Unit:	2616
Customer No.:	21186	Confirmation No.:	8388

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

X Amendment and Response under 37 C.F.R. § 1.111 (8 pgs.)
X Petition for Extension of Time (1 pg.)
X **Authorization to charge Deposit Account 19-0743 in the amount of $150.00 to cover the Extension of Time Fee.**

Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
Customer No.: 21186

By: /Thierry Lo/
Thierry Lo
Reg. No. 49,097

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 11th day of June, 2012.

Chris Bartl
Name

/Christopher Bartl/
Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Shmuel Shaffer et al.	Examiner:	Ankur Jain
Serial No.:	12/127,397	Group Art Unit:	2616
Filed:	May 27, 2008	Docket:	1370.356US1
Customer No.:	21186	Confirmation No.:	8388
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		

PETITION FOR A ONE-MONTH EXTENSION OF TIME

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In accordance with the provision of 37 C.F.R § 1.136(a), it is respectfully requested that a one-month extension of time be granted in which to respond to the Non-Final Office Action mailed February 9, 2012, said period of response being extended from May 9, 2012 to June 9, 2012 (Saturday).

Please charge Deposit Account No. 19-0743 in the amount of $150.00 to cover the required extension fee. Please charge any additional fees or credit overpayment to deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(949) 354-0200

Date June 11, 2012 By /Thierry Lo/
Thierry Lo
Reg. No. 49,097

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 11th day of June, 2012.

Chris Bartl /Christopher Bartl/
Name Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Shmuel Shaffer et al.	Examiner:	Ankur Jain
Serial No.:	12/127,397	Group Art Unit:	2616
Filed:	May 27, 2008	Docket:	1370.356US1
Customer No.:	21186	Confirmation No.:	8388
Title:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		

PETITION FOR A ONE-MONTH EXTENSION OF TIME

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In accordance with the provision of 37 C.F.R § 1.136(a), it is respectfully requested that a one-month extension of time be granted in which to respond to the Non-Final Office Action mailed February 9, 2012, said period of response being extended from May 9, 2012 to June 9, 2012 (Saturday).

Please charge Deposit Account No. 19-0743 in the amount of $150.00 to cover the required extension fee. Please charge any additional fees or credit overpayment to deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(949) 354-0200

Date June 11, 2012 By /Thierry Lo/
Thierry Lo
Reg. No. 49,097

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 11th day of June, 2012.

Chris Bartl /Christopher Bartl/
Name Signature

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
12/127,397	05/27/2008	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
			TOTAL			TOTAL	

* If the difference in column 1 is less than zero, enter "0" in column 2.

APPLICATION AS AMENDED – PART II

AMENDMENT	06/11/2012	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 19	Minus	** 27	= 0	X $ =		OR	X $60=	0
	Independent (37 CFR 1.16(h))	* 4	Minus	***5	= 0	X $ =		OR	X $250=	0
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/TERRY MALLOY/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1	8388

21186 7590 02/09/2012

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
JAIN, ANKUR	

ART UNIT	PAPER NUMBER
2618	

NOTIFICATION DATE	DELIVERY MODE
02/09/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
request@slwip.com

Office Action Summary	Application No.	Applicant(s)	
	12/127,397	SHAFFER ET AL.	
	Examiner	Art Unit	
	ANKUR JAIN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-27* is/are pending in the application.

5a) Of the above claim(s) *20-27* is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-19* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *27 May 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03 June 2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. **Claims 1-19**, drawn to a method comprising: "receiving information associated with an endpoint; identifying information associated with the adherence of the endpoint with a predefined floor control mechanism; and analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy," classified in class 455, subclass 519.

II. **Claims 20-27**, drawn to a method comprising: "initiating communication with a non-compatible communication device; identifying information associated with an initiating device; and negotiating a communication session with an interoperability server (IS) based in part on at least one of the identified information or a predefined floor control mechanism associated with the IS," classified in class 455, subclass 517.

The inventions are independent or distinct, each from the other because:

Inventions I and II are directed to related processes. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the

processes of Invention I and Invention II do not overlap in scope (are mutually exclusive) and are not obvious variants. Invention I deals with receiving information associated with an endpoint; identifying information associated with the adherence of the endpoint with a predefined floor control mechanism; and analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy, whereas Invention II deals with initiating communication with a non-compatible communication device; identifying information associated with an initiating device; and negotiating a communication session with an interoperability server (IS) based in part on at least one of the identified information or a predefined floor control mechanism associated with the IS. Invention II clearly does not overlap in scope and is not an obvious variant in comparison to Invention I. Invention II initiates a separate search and is in a different field. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

(a) the inventions have acquired a separate status in the art in view of their different classification;

(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention**.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either

instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Mr. Thierry Lo a provisional election was made **without traverse** to prosecute the invention of **Invention I, claims 1-19**. Affirmation of this election must be made by applicant in replying to this Office action. **Claims 20-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al, US 2007/0105579 A1 (hereafter referenced as Shaffer), in view of Shell et al, US 2004/0224668 A1 (hereafter referenced as Shell).

Regarding **Claim 1, 13, and 17**, Shaffer teaches “receiving information associated with an endpoint” (see Paragraphs 0053-0054, 0058, and Figure 3). Shaffer teaches “an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the

adherence of the endpoint with a predefined floor control mechanism" (see Paragraphs 0053-0054, 0058, 0063 and Figure 3). The claimed limitation clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" and "analyzed" by IS 100. Shaffer does not teach "a dynamic proxy component that is employed to dynamically proxy an endpoint based on a determination." However, Shell teaches "a dynamic proxy component that is employed to dynamically proxy an endpoint based on a determination" (see Paragraph 0090 and Figures 1-3). The claimed limitation clearly reads on how proxy 225 may cause a connection to be established to a proxy server. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Shaffer to incorporate a dynamic proxy component that is employed to dynamically proxy an endpoint based on a determination as taught by Shell, for the purpose of increasing the functionality and versatility of the proxy media service system of Shaffer, and since Shaffer identically discloses a proxy media service 220 as disclosed in Paragraph 0080 and Figure 5.

Regarding **Claim 2**, Shaffer teaches "wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams" (see Paragraph 0063). The claimed limitation clearly reads on the floor control denial signal if endpoint 90, for example, has the floor.

Regarding **Claim 3**, Shaffer teaches "further comprising a resource determination component that identifies a plurality of available system resources to optimize resource

utilization" (see Paragraph 0064-0065). The claimed limitation clearly reads on how IS 100 "optimizes resource utilization" by preventing certain endpoints from controlling the floor for extended amounts of time.

Regarding **Claim 7**, Shaffer teaches "an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis" (see Paragraphs 0053-0054, 0058, 0063, and Figure 3). The claimed limitation reads on full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" by IS 100.

Regarding **Claim 8 and Claim 15**, Shaffer teaches "wherein one or more disparate endpoints identify the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint" (see Paragraph 0063). The claimed limitation reads on full-duplex endpoint 80 receiving a floor control denial signal, which is indicative of endpoint 80 "non-conforming with the floor control mechanism based in part on monitoring the endpoint."

Regarding **Claim 9 and Claim 16 and Claim 18**, Shell teaches "wherein a proxy is dynamically inserted" (see Paragraph 0090 and Figures 1-3). Shaffer teaches "between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism" (see Paragraphs 0053-0054, 0058, 0063, and Figure 3). The claimed limitation reads on full-duplex endpoint 80 receiving a floor control denial signal, which is indicative of endpoint 80 "non-conforming with the floor control mechanism."

Regarding **Claim 10**, Shaffer teaches "wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG" (see Paragraph 0065). The claimed limitation reads on the priority of the VTG being changed based on an event associated with the VTG.

Regarding **Claim 11**, Shell teaches "wherein the dynamic proxy component dynamically establishes a communication path between an endpoint and one or more disparate endpoints" (see Paragraph 0090 and Figures 1-3). The claimed limitation clearly reads on how proxy 225 may cause a connection to be established to a proxy server. Shaffer teaches "based in part on the analysis" (see Paragraphs 0053-0054, 0058, and Figure 3).

Regarding **Claim 12**, Shaffer teaches "a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG" (see Paragraph 0058 and 0063). "Media capabilities of the endpoint" clearly reads on the full duplex endpoint 80, and the "determination" clearly reads on the full-duplex endpoint 80 gaining and not gaining floor control with half-duplex endpoints 90 (which form the virtual talk group (VTG)), which is "determined" by IS 100.

Regarding **Claim 14**, Shaffer teaches "identifying at least one of media capability information or identity information associated with the endpoint" (see Paragraph 0061). "Identity information associated with the endpoint" clearly reads on recognizing that endpoint 80 is connected via a full duplex connection.

Regarding **Claim 19**, Shaffer teaches "means for dynamically establishing a communication path between the devices based in part on the analysis" (see Paragraphs 0053-0054 and 0058). The claimed limitation reads on granting floor control to endpoint 80.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer in view of Shell, as applied to Claims 1 and 4-5, and further in view of Grealish et al, US 2009/0093235 A1 (hereafter referenced as Grealish).

Regarding **Claim 4**, the combination of Shaffer and Shell does not teach "an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint." However, Grealish teaches "an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint" (see Paragraphs 0031 and 0035). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination to include an identity collection component that receives an identity of an endpoint to assess a security risk associated with the endpoint as taught by Grealish, for the purpose of enhancing the functionality and versatility of IS 100 when acting as an intermediary between half duplex endpoints 90 and full duplex endpoint 80, which are part of different communication networks and are non-compatible communication devices.

Regarding **Claim 5**, the combination of Shaffer, Shell, and Grealish teaches "wherein the identity collection component employs credentials resident on the endpoint" (see Paragraphs 0031 and 0035 of Grealish). The claimed limitation clearly

reads on the make, model, and device features, including data storage capabilities of the "endpoint."

Regarding **Claim 6**, the combination of Shaffer, Shell, and Grealish teaches "security risk associated with the endpoint" (see Paragraph 0031 and 0035 of Grealish). The combination also teaches "transmitting into a given VTG without adhering with the floor control policy of the system" (see Paragraph 0066 of Shaffer). The claimed limitation clearly reads on how full duplex endpoint 80 may not understand or otherwise be capable of communication with the VTG.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ankur Jain whose telephone number is 571-272-9747. The examiner can normally be reached on M-F, 9:00 am to 4:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yuwen Pan, can be reached on 571-272-7855. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ankur Jain/
Examiner, Art Unit 2618
02/03/2012

/DUC NGUYEN/
Supervisory Patent Examiner, Art Unit 2618

Notice of References Cited	Application/Control No. 12/127,397	Applicant(s)/Patent Under Reexamination SHAFFER ET AL.	
	Examiner ANKUR JAIN	Art Unit 2618	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2004/0224668 A1	11-2004	Shell et al.	455/412.1
*	B	US-2007/0105579 A1	05-2007	Shaffer et al.	455/519
*	C	US-2009/0093235 A1	04-2009	Grealish et al.	455/411
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	Art Unit
	ANKUR JAIN	2618

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	02/03/2012								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
	9	✓								
	10	✓								
	11	✓								
	12	✓								
	13	✓								
	14	✓								
	15	✓								
	16	✓								
	17	✓								
	18	✓								
	19	✓								
	20	N								
	21	N								
	22	N								
	23	N								
	24	N								
	25	N								
	26	N								
	27	N								

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

BIB DATA SHEET

CONFIRMATION NO. 8388

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
12/127,397	05/27/2008	455	2618	1370.356US1

APPLICANTS

Shmuel Shaffer, Palo Alto, CA;
Amit Barave, Sunnyvale, CA;
Steven Christenson, Campbell, CA;
Marcelo Oliveira, San Jose, CA;

**** CONTINUING DATA ***************************

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****
06/04/2008

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /ANKUR JAIN/ Examiner's Signature	☐ Met after Allowance AJ Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		CA	11	27	5

ADDRESS

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402
UNITED STATES

TITLE

INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

FILING FEE RECEIVED		
1800	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	591	((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 (insert$5 or attach$5 or connect$6) near5 (proxy))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:42
L2	43	L1 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:43
L3	504	((SHMUEL) near2 (SHAFFER)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:45
L4	15	((AMIT) near2 (BARAVE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:45
L5	57	((STEVEN) near2 (CHRISTENSON)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:46
L6	33	((MARCELO) near2 (OLIVEIRA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2012/02/03 11:46
L7	557	L3 or L4 or L5 or L6	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:46
L8	1	L7 AND (VTG AND proxy AND floor).CLM.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 11:47
L9	2	("20070105579" | "20070270172").PN.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 12:13
L10	0	(security ADJ risk$2) WITH PTT WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
L11	0	(security ADJ risk$2) SAME PTT SAME ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
L12	0	(security) SAME PTT SAME ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30
L13	0	(security) SAME ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5) SAME VTG	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:30

L14	1110	(security) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:31
L15	17	(security near4 risk$2) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:31
L16	1110	(security) WITH ((determin$6 or ascertain$4 or decid$4 or assess$6 or evaluat$6) near5 identit$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:34
L17	1	L16 AND 455/517-519.CCLS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:35
L18	65	L16 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 13:35
L19	1	12/127397.APP. AND (alter$4 WITH conceal$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:25
L20	2	(alter$4 near5 parameters near5 group) AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:32
L21	321	(alter$6 or updat$5 or modif$7 or chang$5 or switch$4 or transform$6) near6 parameter$4 near6 (conceal$6 or hid$5)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:45
L22	8	L21 AND "455".CLAS.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2012/02/03 15:45

2/ 3/ 2012 5:03:29 PM
C:\ Users\ ajain1\ Documents\ EAST\ Workspaces\ 12127397.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	12127397	SHAFFER ET AL.
	Examiner	Art Unit
	ANKUR JAIN	2618

SEARCHED			
Class	Subclass	Date	Examiner
455	519	2/3/2012	AJ

SEARCH NOTES		
Search Notes	Date	Examiner
EAST Search attached.	2/3/2012	AJ

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

PTO/SB/08a (05-07)
Approved for use through 09/30/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	12127397
Filing Date	2008-05-27
First Named Inventor	Shmuel Shaffer
Art Unit	
Examiner Name	Unknown
Attorney Docket Number	CPOL955474/CSCOP130US

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20070270172		2007-11-07	Kalley, et al.	
	2	20070105579		2007-05-10	Shaffer, et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.J./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	12127397
	Filing Date	2008-05-27
	First Named Inventor	Shmuel Shaffer
	Art Unit	
	Examiner Name	Unknown
	Attorney Docket Number	CPOL955474/CSCOP130US

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Cisco Systems. Cisco Brings IP Networking to World of Two-Way Radios. http://newsroom.cisco.com/dlls/2005/ts_102405.html. Last accessed June 3, 2008.	☐
	2	Cisco Systems. Enable Communication Interoperability. http://www.cisco.com/en/US/products/ps6712/products_announcement0900aecd803498d8.html. Last accessed June 3, 2008.	☐

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Ankur Jain/	Date Considered	02/03/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.J./

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1

CONFIRMATION NO. 8388

21186
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

PUBLICATION NOTICE

OC000000039072842

Title:INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Publication No.US-2009-0298525-A1
Publication Date:12/03/2009

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/127,397	05/27/2008	Shmuel Shaffer	1370.356US1

CONFIRMATION NO. 8388

21186
SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

POA ACCEPTANCE LETTER

OC000000037252222

Date Mailed: 08/11/2009

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/03/2009.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/fstephanos/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
12/127,397	05/27/2008	Shmuel Shaffer	CPOL955474/CSCOP130US

CONFIRMATION NO. 8388

POWER OF ATTORNEY NOTICE

23623
TUROCY & WATSON, LLP
127 Public Square
57th Floor, Key Tower
CLEVELAND, OH 44114

OC000000037252204

Date Mailed: 08/11/2009

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/03/2009.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/fstephanos/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

PTO/SB/80 (11-08)
Approved for use through 11/30/2011. OMB 0651-0035
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☑ Practitioners associated with the Customer Number: 21186

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☑ The address associated with Customer Number: 21186

OR

☐ Firm or Individual Name			
Address			
City		State	Zip
Country			
Telephone		Email	

Assignee Name and Address:

Cisco Technology, Inc., 170 West Tasman Drive, San Jose, CA, 95134-1706

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	May 15, 2009
Name	Mallun Yen	Telephone	408-526-2400
Title	Vice President and Assistant Secretary		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

RECEIVED
CENTRAL FAX CENTER
AUG - 3 2009

PTO/SB/96 (06-09)
Approved for use through 07/31/2009. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Shaffer et al. 1370.356US1

Application No./Patent No.: 12/127,397 Filed/Issue Date: May 27, 2008

Titled: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Cisco Technology, Inc. , a Corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.

states that it is:

1. ☒ the assignee of the entire right, title, and interest in;

2. ☐ an assignee of less than the entire right, title, and interest in (The extent (by percentage) of its ownership interest is _____ %); or

3. ☐ the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)

the patent application/patent identified above, by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 021003, Frame 0843, or for which a copy therefore is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☐ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Michael Hsu/ 7/31/2009
Signature Date

Michael K. Hsu Attorney Reg. No. 46,782
Printed or Typed Name Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

RECEIVED
CENTRAL FAX CENTER
AUG - 3 2009

SCHWEGMAN ■ LUNDBERG ■ WOESSNER
PATENT, TRADEMARK & COPYRIGHT ATTORNEYS
P.O. Box 2938
Minneapolis, MN 55402
Telephone (612) 373-6900 Facsimile (612) 339-3061

August 3, 2009
~~July 30, 2009~~

TO: Commissioner for Patents
Patent Examining Corps
Facsimile Center
P.O. Box 1450
Alexandria, VA 22313-1450

FAX NUMBER (571) 273-8300

FROM: Michael K. Hsu
OUR REF: 1370.356US1

*** Please deliver to Examiner in Art Unit 2616. ***

Documents Transmitted: **Power of Attorney to Prosecute Applications Before the USPTO (1 pg.) and Statement Under 37 CFR 3.73(b) (1 pg.).**

Total pages of this transmission, including cover letter: 3 pgs.
If you do NOT receive all of the pages described above, please telephone us at 612-373-6900 or fax us at 612-339-3061.

In re. Patent Application of: Shmuel Shaffer et al.
Serial No.: 12/127,397
Filed: May 27, 2008
Title: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Examiner: Unknown
Group Art Unit: 2616
Docket No.: 1370.356US1

By: Michael Hsu /
Name: Michael K. Hsu
Reg. No.: 46,782

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

Nellie Nuhring

8/3/09
Date of Transmission

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
12/127,397	05/27/2008	2616	1800	CPOL955474/CSCOP130US	27	5

CONFIRMATION NO. 8388

23623
AMIN, TUROCY & CALVIN, LLP
1900 EAST 9TH STREET, NATIONAL CITY CENTER
24TH FLOOR,
CLEVELAND, OH 44114

FILING RECEIPT

OC00000030306662

Date Mailed: 06/12/2008

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Shmuel Shaffer, Palo Alto, CA;
Amit Barave, Sunnyvale, CA;
Steven Christenson, Campbell, CA;
Marcelo Oliveira, San Jose, CA;

Assignment For Published Patent Application

CISCO TECHNOLOGY, INC., San Jose, CA

Power of Attorney: The patent practitioners associated with Customer Number 23623

Domestic Priority data as claimed by applicant

Foreign Applications

If Required, Foreign Filing License Granted: 06/04/2008

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 12/127,397**

Projected Publication Date: 12/03/2009

Non-Publication Request: No

Early Publication Request: No

Title

INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

Preliminary Class

370

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where

the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

PTO/SB/08a (05-07)
Approved for use through 09/30/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	12127397
Filing Date	2008-05-27
First Named Inventor	Shmuel Shaffer
Art Unit	
Examiner Name	Unknown
Attorney Docket Number	CPOL955474/CSCOP130US

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20070270172		2007-11-07	Kalley, et al.	
	2	20070105579		2007-05-10	Shaffer, et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	12127397
	Filing Date	2008-05-27
	First Named Inventor	Shmuel Shaffer
	Art Unit	
	Examiner Name	Unknown
	Attorney Docket Number	CPOL955474/CSCOP130US

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Cisco Systems. Cisco Brings IP Networking to World of Two-Way Radios. http://newsroom.cisco.com/dlls/2005/ts_102405.html. Last accessed June 3, 2008.	☐
	2	Cisco Systems. Enable Communication Interoperability. http://www.cisco.com/en/US/products/ps6712/products_announcement0900aecd803498d8.html. Last accessed June 3, 2008.	☐

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	12127397
	Filing Date	2008-05-27
	First Named Inventor	Shmuel Shaffer
	Art Unit	
	Examiner Name	Unknown
	Attorney Docket Number	CPOL955474/CSCOP130US

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/James J. Pingor/	Date (YYYY-MM-DD)	2008-06-03
Name/Print	James J. Pingor	Registration Number	51382

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	3394818
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	23623
Filer:	James Joseph Pingor./Michelle Folger
Filer Authorized By:	James Joseph Pingor.
Attorney Docket Number:	CPOL955474/CSCOP130US
Receipt Date:	03-JUN-2008
Filing Date:	
Time Stamp:	16:52:34
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed	US_IDS_Form__SB_08a.pdf	804234 ee1156aa1946dd26f8035434003d38a0c2f15ce7	no	4

Warnings:	
Information:	

2	NPL Documents	NPL11.pdf	558297 19164f2df635a13cc0c5357c804f9df934fd533d	no	5
Warnings:					
Information:					
3	NPL Documents	NPL22.pdf	389789 f2aaa3345fd7100f2950524196ce73beccfce729	no	3
Warnings:					
Information:					
			Total Files Size (in bytes):	1752320	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

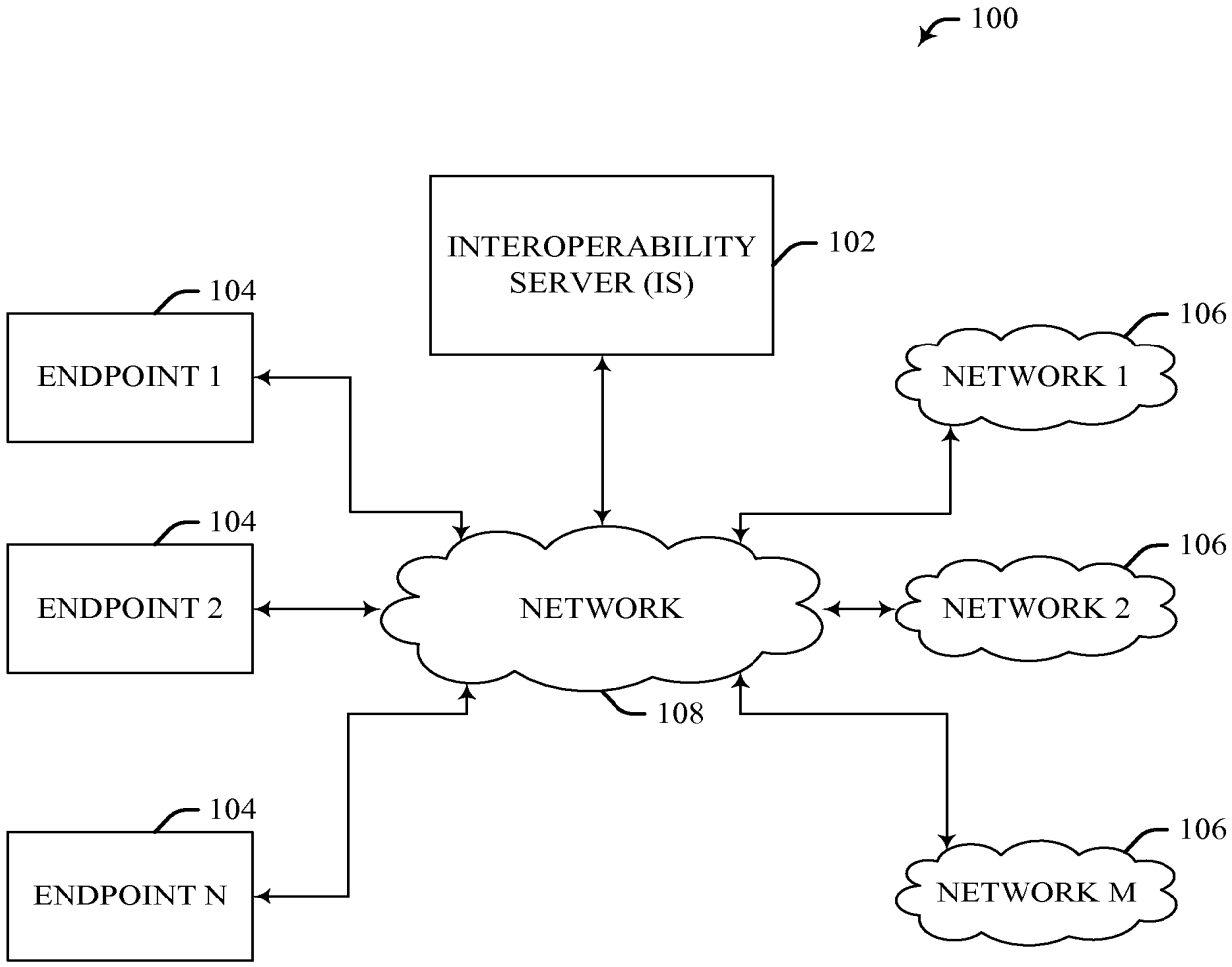

100
INTEROPERABILITY SERVER (IS)
102
104
ENDPOINT 1
104
ENDPOINT 2
104
ENDPOINT N
106
NETWORK 1
106
NETWORK 2
106
NETWORK M
NETWORK
108

FIG. 1

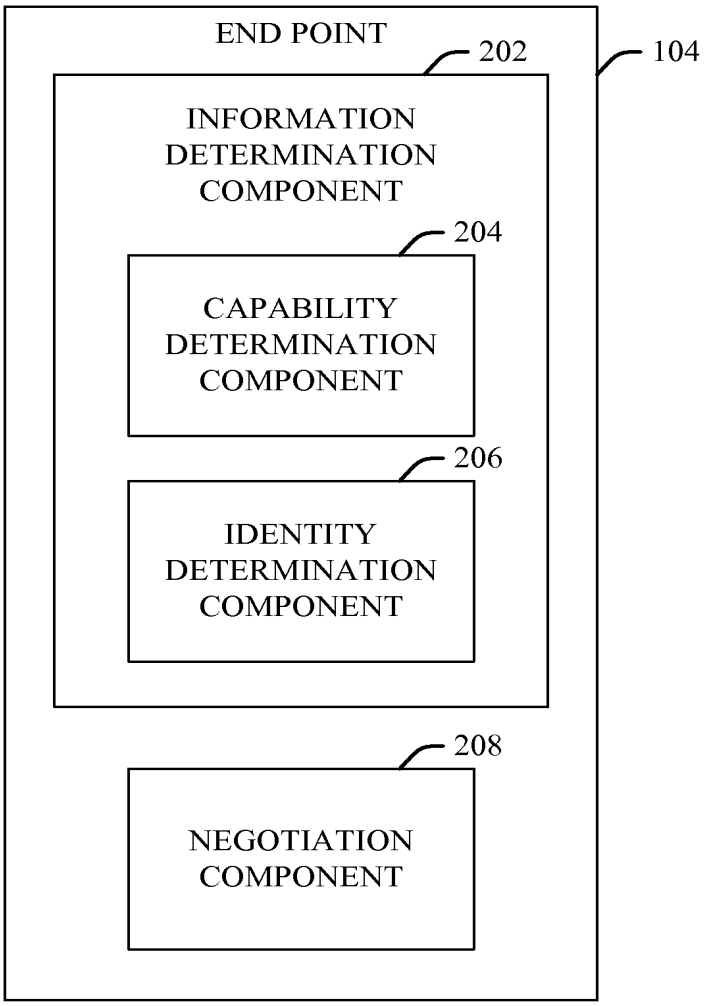

END POINT
104
202
INFORMATION DETERMINATION COMPONENT
204
CAPABILITY DETERMINATION COMPONENT
206
IDENTITY DETERMINATION COMPONENT
208
NEGOTIATION COMPONENT

FIG. 2

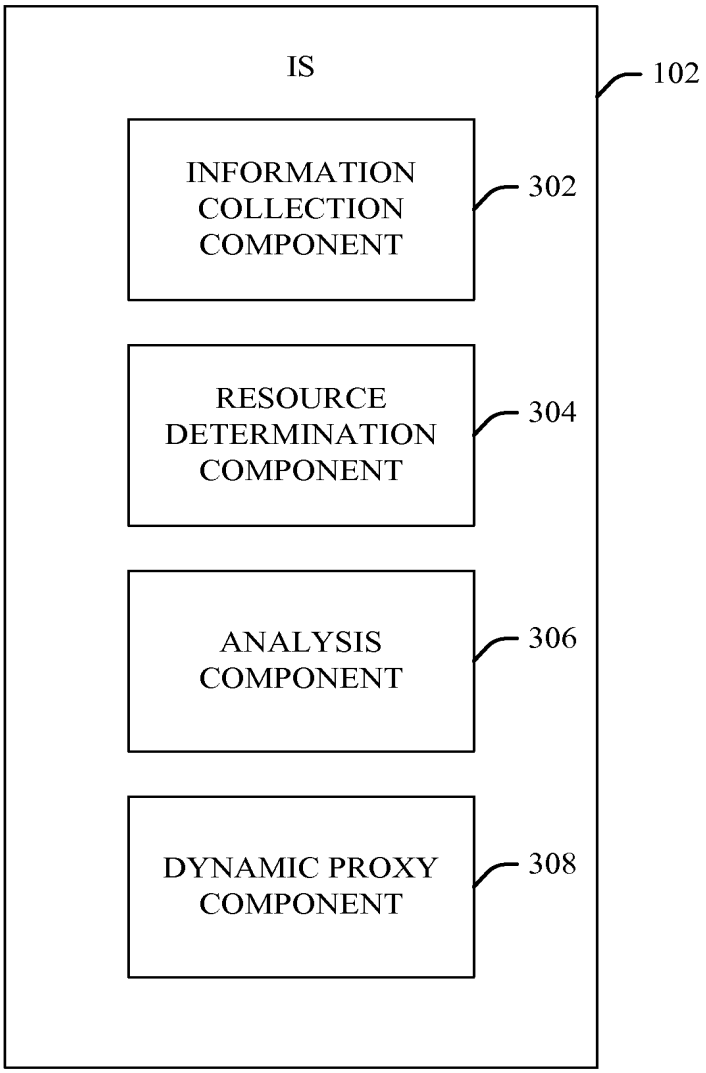

IS
102
INFORMATION COLLECTION COMPONENT
302
RESOURCE DETERMINATION COMPONENT
304
ANALYSIS COMPONENT
306
DYNAMIC PROXY COMPONENT
308

FIG. 3

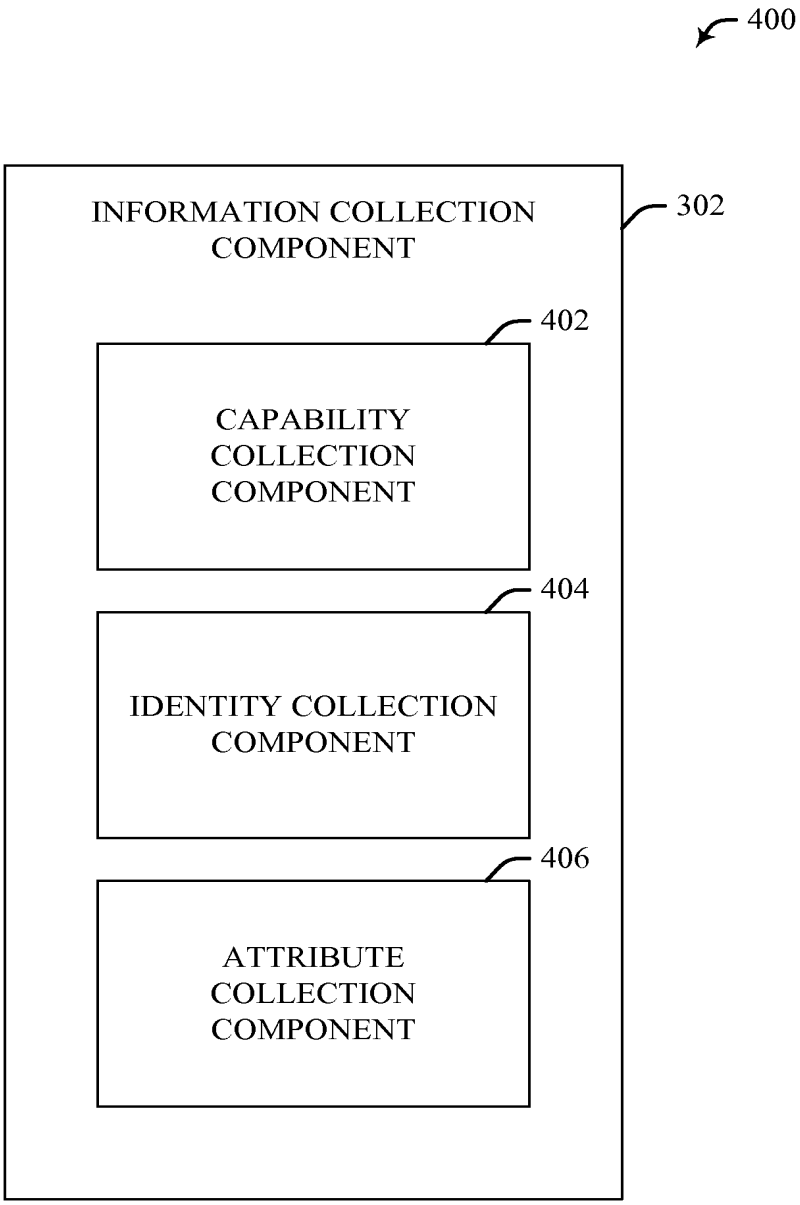

400
INFORMATION COLLECTION COMPONENT
302
402
CAPABILITY COLLECTION COMPONENT
404
IDENTITY COLLECTION COMPONENT
406
ATTRIBUTE COLLECTION COMPONENT

FIG. 4

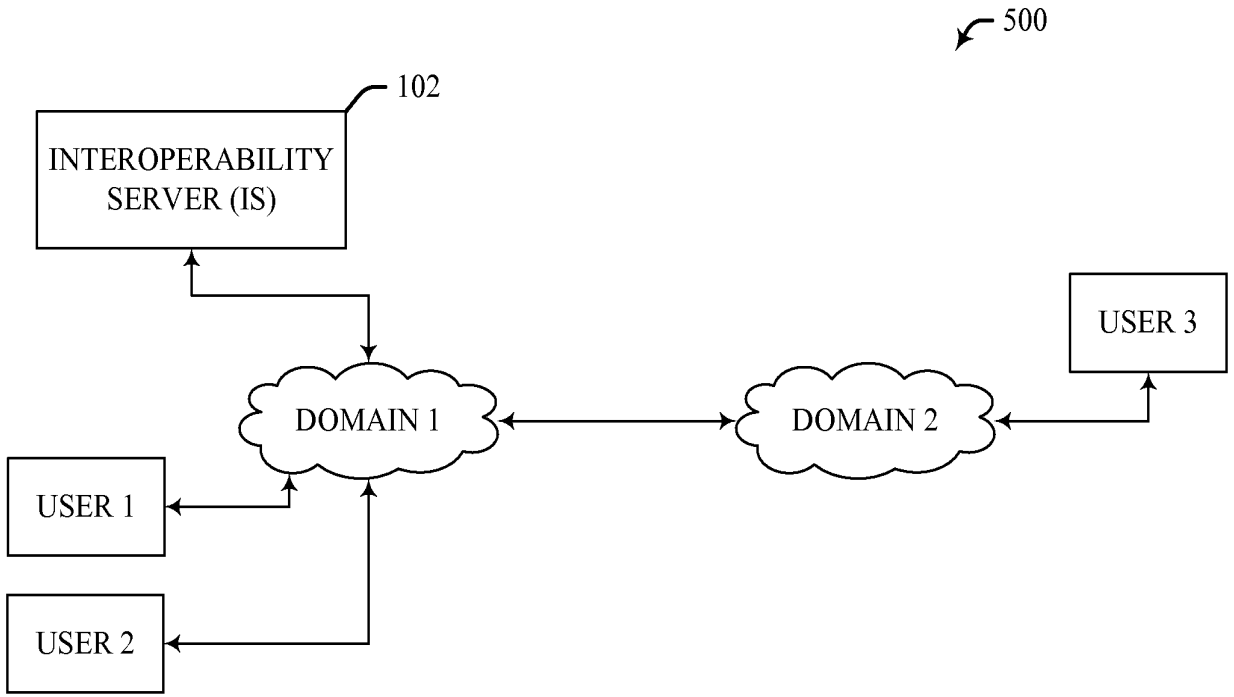

500
102
INTEROPERABILITY SERVER (IS)
USER 3
DOMAIN 1
DOMAIN 2
USER 1
USER 2

FIG. 5

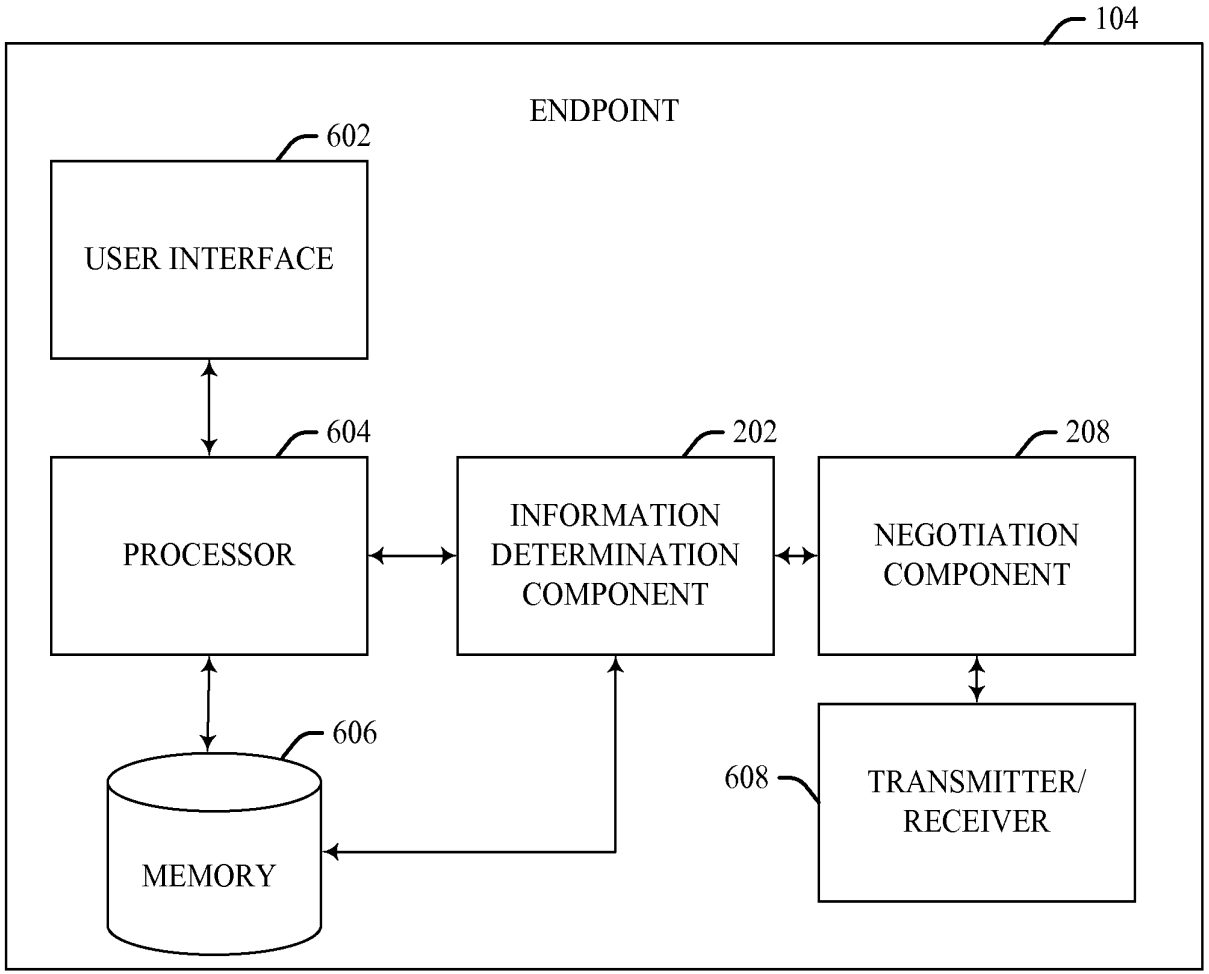

104
600
ENDPOINT
602
USER INTERFACE
604
PROCESSOR
202
INFORMATION DETERMINATION COMPONENT
208
NEGOTIATION COMPONENT
606
MEMORY
608
TRANSMITTER/ RECEIVER

FIG. 6

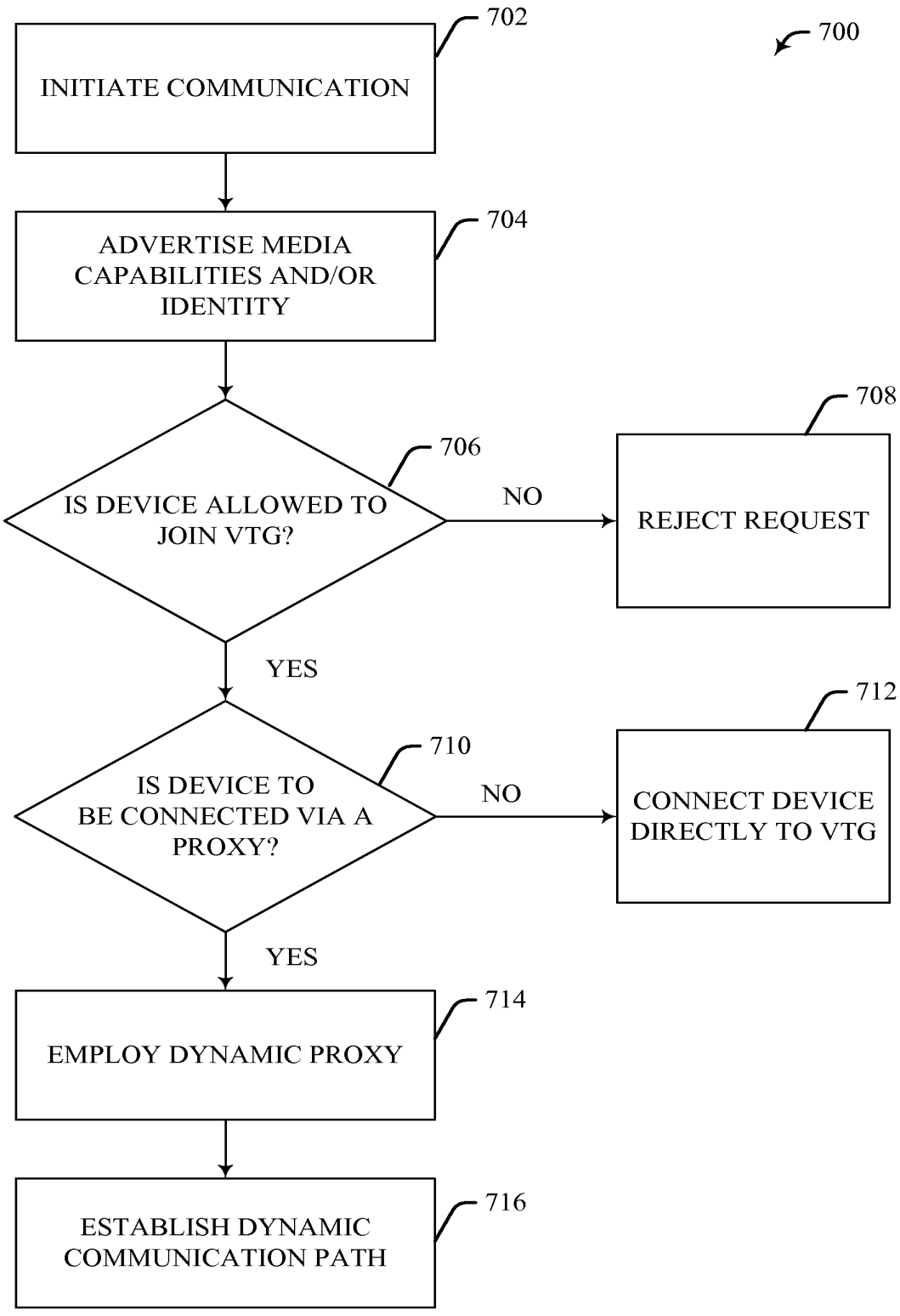

700
INITIATE COMMUNICATION
702
ADVERTISE MEDIA CAPABILITIES AND/OR IDENTITY
704
IS DEVICE ALLOWED TO JOIN VTG?
706
NO
REJECT REQUEST
708
YES
IS DEVICE TO BE CONNECTED VIA A PROXY?
710
NO
CONNECT DEVICE DIRECTLY TO VTG
712
YES
EMPLOY DYNAMIC PROXY
714
ESTABLISH DYNAMIC COMMUNICATION PATH
716

FIG. 7

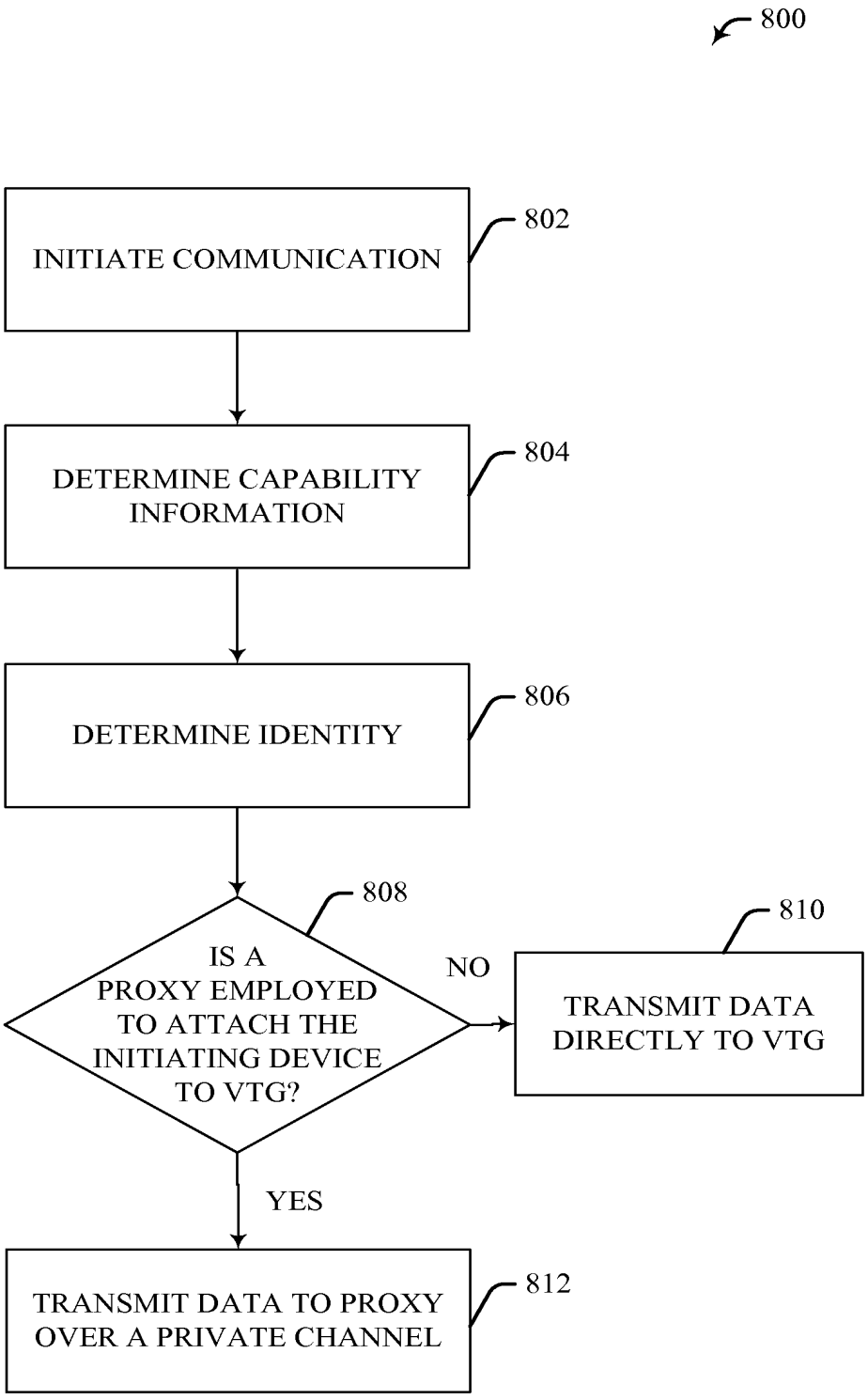

800
INITIATE COMMUNICATION
802
DETERMINE CAPABILITY INFORMATION
804
DETERMINE IDENTITY
806
IS A PROXY EMPLOYED TO ATTACH THE INITIATING DEVICE TO VTG?
808
NO
TRANSMIT DATA DIRECTLY TO VTG
810
YES
TRANSMIT DATA TO PROXY OVER A PRIVATE CHANNEL
812

FIG. 8

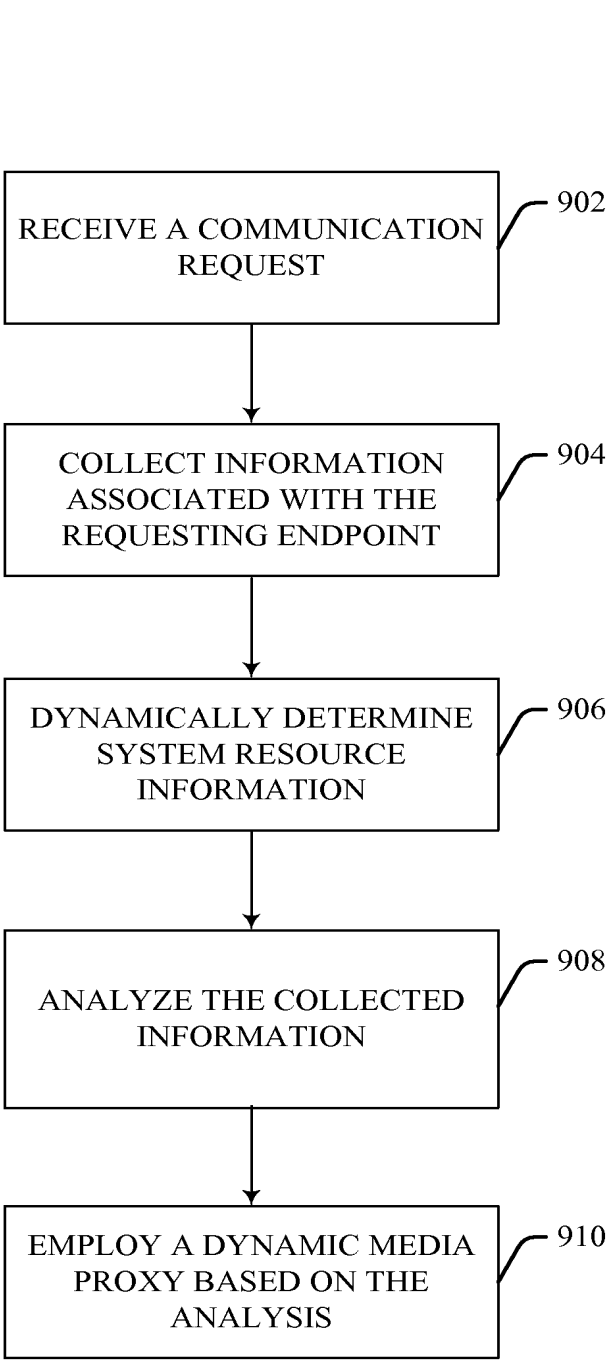

900
RECEIVE A COMMUNICATION REQUEST
902
COLLECT INFORMATION ASSOCIATED WITH THE REQUESTING ENDPOINT
904
DYNAMICALLY DETERMINE SYSTEM RESOURCE INFORMATION
906
ANALYZE THE COLLECTED INFORMATION
908
EMPLOY A DYNAMIC MEDIA PROXY BASED ON THE ANALYSIS
910

FIG. 9

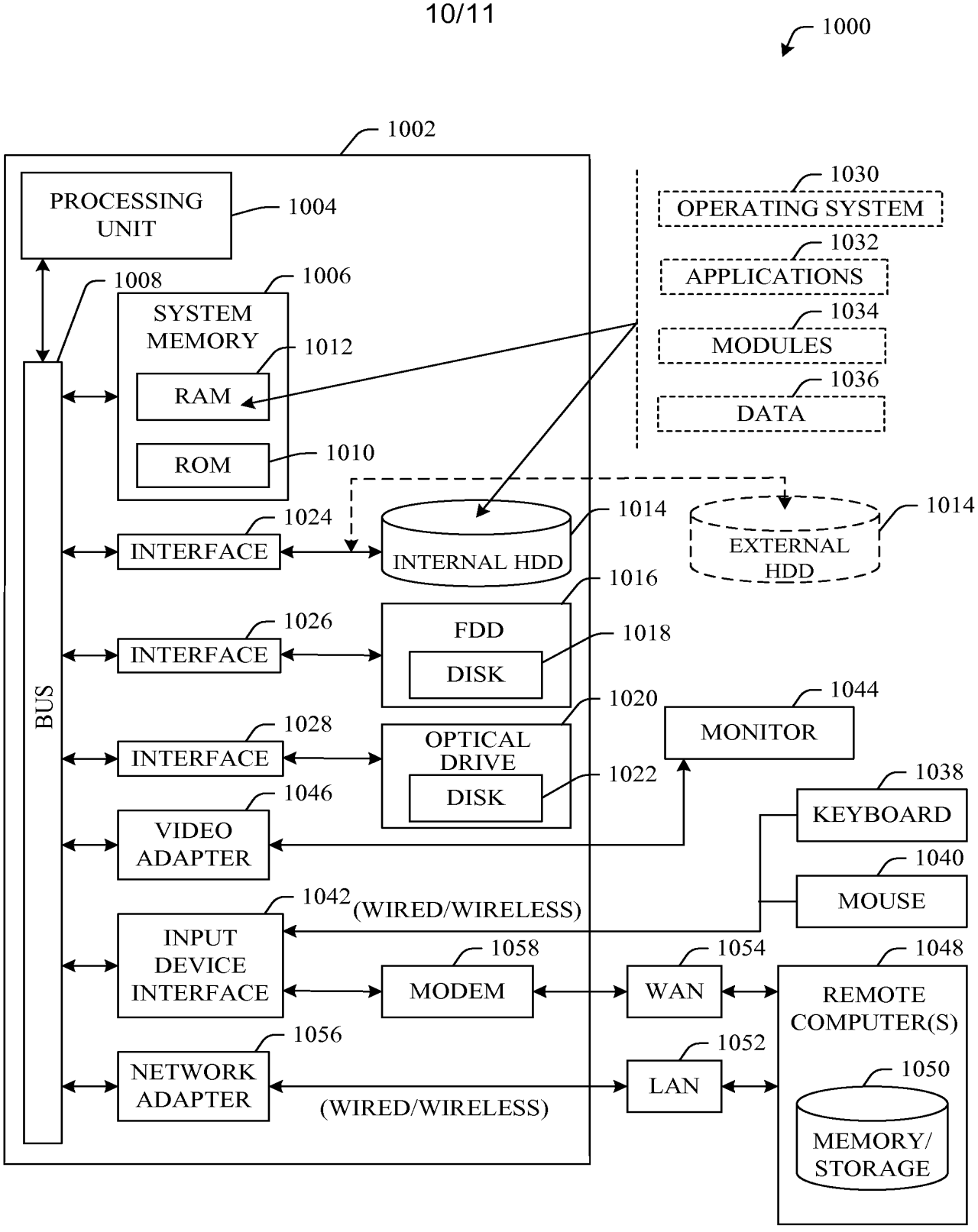

1000
1002
PROCESSING UNIT
1004
1008
1006
SYSTEM MEMORY
1012
RAM
ROM
1010
BUS
1030
OPERATING SYSTEM
1032
APPLICATIONS
1034
MODULES
1036
DATA
1024
INTERFACE
1014
INTERNAL HDD
1014
EXTERNAL HDD
1016
1026
INTERFACE
FDD
1018
DISK
1020
1044
MONITOR
1028
INTERFACE
OPTICAL DRIVE
1022
DISK
1038
KEYBOARD
1046
VIDEO ADAPTER
1040
MOUSE
1042
(WIRED/WIRELESS)
INPUT DEVICE INTERFACE
1058
MODEM
1054
WAN
1048
REMOTE COMPUTER(S)
1056
NETWORK ADAPTER
1052
LAN
1050
MEMORY/ STORAGE
(WIRED/WIRELESS)

FIG. 10

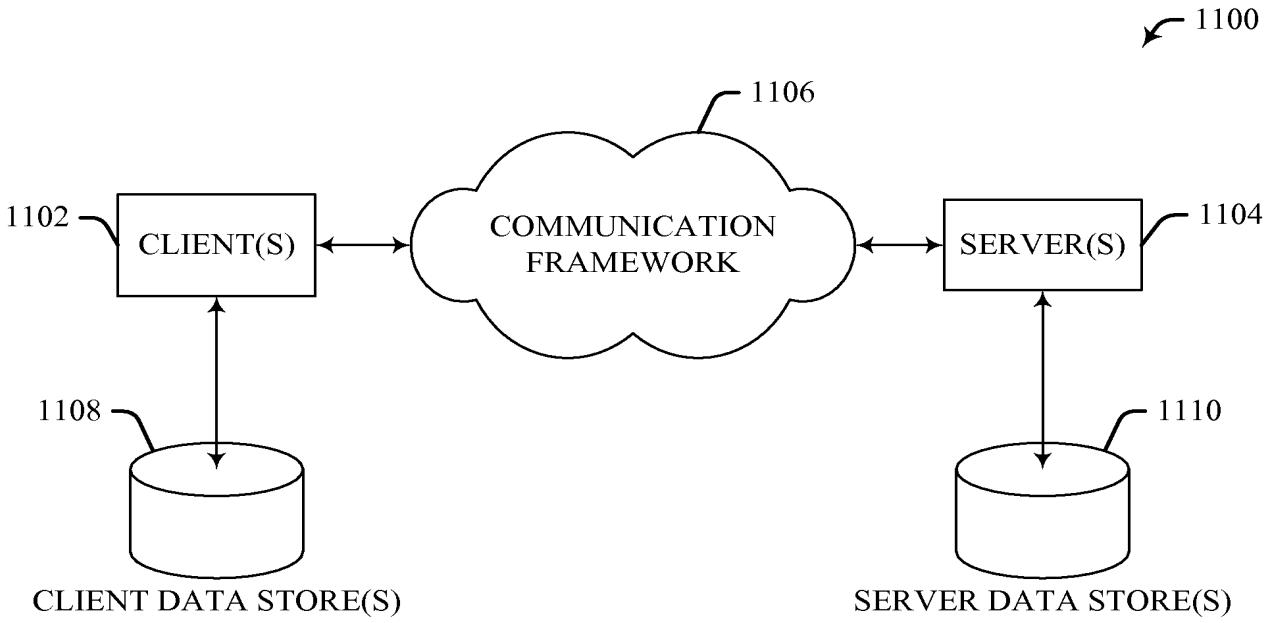

1100
1106
1102
CLIENT(S)
COMMUNICATION FRAMEWORK
SERVER(S)
1104
1108
1110
CLIENT DATA STORE(S)
SERVER DATA STORE(S)

FIG. 11

PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY

ATTORNEY DOCKET NO. CSCOP130US CISCO DOCKET NO. CPOL955474

As a below named inventor, I hereby declare that:
My residence/post office address and citizenship are as stated below next to my name;
I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:
INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION the specification of which is filed herewith unless the following box is checked:

( ) was filed on _____ as US Application Serial No. or PCT International Application Number _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.

Foreign Application(s) and/or Claim of Foreign Priority

I hereby claim foreign priority benefits under Title 35, United States Code Section 119 of any foreign application(s) for patent or inventor(s) certificate listed below and have also identified below any foreign application for patent or inventor(s) certificate having a filing date before that of the application on which priority is claimed:

COUNTRY	APPLICATION NUMBER	DATE FILED	PRIORITY CLAIMED UNDER 35 U.S.C. 119
			YES:____ NO:
			YES:____ NO:

POWER OF ATTORNEY:

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) associated with

Customer No. **23623**

to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Himanshu S. Amin Reg. No. 40,894	Neil P. Calvin Reg. No. 36,395	James J. Pingor Reg. No. 51,382

Send Correspondence to:		Direct Telephone Calls To:	
Contact Name:	James J. Pingor	Contact Name:	James J. Pingor
Firm Name:	Amin, Turocy & Calvin, LLP	Contact Phone Number:	(216) 696-8730
Firm Address:	1900 E. 9th Street, National City Center – 24th Floor		
City, State and Zip:	Cleveland, OH 44114		

Motorola - Exhibit 1028 - Page 335

PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY

ATTORNEY DOCKET NO. CSCOP130US CISCO DOCKET NO. CPOL955474

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Inventor: Shmuel Shaffer Citizenship: United States

Residence: Palo Alto, California

Post Office Address: 1211 Cowper Street

Palo Alto, California 94301

Shmuel Shaffer 5/19/2008

Inventor's Signature Date

Full Name of Inventor: Amit Bapave Citizenship: India

Residence: Sunnyvale, California

Post Office Address: 953 South Wolfe Road

Sunnyvale, California 94086

Inventor's Signature Date

Full Name of Inventor: Steven Christenson Citizenship: United States

Residence: Campbell, California

Post Office Address: 1162 Buckmam Avenue

Campbell, California 95008

Inventor's Signature Date

Full Name of Inventor: Marcelo Oliveira Citizenship: Brazil

Residence: San Jose, California

Post Office Address: 60 Descanso Drive #2219

San Jose, California 95134

PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY

ATTORNEY DOCKET NO. CSCOP130US CISCO DOCKET NO. CPOL955474

As a below named inventor, I hereby declare that:
My residence/post office address and citizenship are as stated below next to my name;
I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:
INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION the specification of which is filed herewith unless the following box is checked:

( ) was filed on _____ as US Application Serial No. or PCT International Application Number _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.

Foreign Application(s) and/or Claim of Foreign Priority

I hereby claim foreign priority benefits under Title 35, United States Code Section 119 of any foreign application(s) for patent or inventor(s) certificate listed below and have also identified below any foreign application for patent or inventor(s) certificate having a filing date before that of the application on which priority is claimed:

COUNTRY	APPLICATION NUMBER	DATE FILED	PRIORITY CLAIMED UNDER 35 U.S.C. 119
			YES:___ NO:
			YES:___ NO:

POWER OF ATTORNEY:

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) associated with

Customer No. 23623

to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Himanshu S. Amin Reg. No. 40,894	Neil P. Calvin Reg. No. 36,395	James J. Pingor Reg. No. 51,382

Send Correspondence to:		Direct Telephone Calls To:	
Contact Name:	James J. Pingor	Contact Name:	James J. Pingor
Firm Name:	Amin, Turocy & Calvin, LLP	Contact Phone Number:	(216) 696-8730
Firm Address:	1900 E. 9th Street, National City Center – 24th Floor		
City, State and Zip:	Cleveland, OH 44114		

Motorola - Exhibit 1028 - Page 337

PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY

ATTORNEY DOCKET NO. CSCOP130US CISCO DOCKET NO. CPOL955474

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Inventor: Shmuel Schaffer Citizenship: United States

Residence: Palo Alto, California

Post Office Address: 1211 Cowper Street

Palo Alto, California 94301

Inventor's Signature Date

Full Name of Inventor: Amit Barave Citizenship: India

Residence: Sunnyvale, California

Post Office Address: 953 South Wolfe Road

Sunnyvale, California 94086

Inventor's Signature 5/23/2008
Date

Full Name of Inventor: Steven Christenson Citizenship: United States

Residence: Campbell, California

Post Office Address: 1162 Bucknam Avenue

Campbell, California 95008

Inventor's Signature Date

Full Name of Inventor: Marcelo Oliveira Citizenship: Brazil

Residence: San Jose, California

Post Office Address: 60 Descanso Drive #2219

San Jose, California 95134

Inventor's Signature Date

Motorola - Exhibit 1028 - Page 338

PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY

ATTORNEY DOCKET NO. CSCOP130US CISCO DOCKET NO. CPOL955474

As a below named inventor, I hereby declare that:
My residence/post office address and citizenship are as stated below next to my name;
I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:
INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION the specification of which is filed herewith unless the following box is checked:

( ) was filed on _____ as US Application Serial No. or PCT International Application Number _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.

Foreign Application(s) and/or Claim of Foreign Priority

I hereby claim foreign priority benefits under Title 35, United States Code Section 119 of any foreign application(s) for patent or inventor(s) certificate listed below and have also identified below any foreign application for patent or inventor(s) certificate having a filing date before that of the application on which priority is claimed:

COUNTRY	APPLICATION NUMBER	DATE FILED	PRIORITY CLAIMED UNDER 35 U.S.C. 119
			YES:___ NO:
			YES:___ NO:

POWER OF ATTORNEY:

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) associated with

Customer No. **23623**

to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Himanshu S. Amin Reg. No. 40,894	Neil P. Calvin Reg. No. 36,395	James J. Pingor Reg. No. 51,382

Send Correspondence to:		Direct Telephone Calls To:	
Contact Name:	James J. Pingor	Contact Name:	James J. Pingor
Firm Name:	Amin, Turocy & Calvin, LLP	Contact Phone Number:	(216) 696-8730
Firm Address:	1900 E. 9th Street, National City Center – 24th Floor		
City, State and Zip:	Cleveland, OH 44114		

Motorola - Exhibit 1028 - Page 339

PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY

ATTORNEY DOCKET NO. CSCOP130US CISCO DOCKET NO. CPOL955474

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Inventor: Shmuel Schaffer Citizenship: United States

Residence: Palo Alto, California

Post Office Address: 1211 Cowper Street

Palo Alto, California 94301

Inventor's Signature Date

Full Name of Inventor: Amit Barave Citizenship: India

Residence: Sunnyvale, California

Post Office Address: 953 South Wolfe Road

Sunnyvale, California 94086

Inventor's Signature Date

Full Name of Inventor: Steven Christenson Citizenship: United States

Residence: Campbell, California

Post Office Address: 1162 Bucknam Avenue

Campbell, California 95008

Inventor's Signature 5/23/2008 Date

Full Name of Inventor: Marcelo Oliveira Citizenship: Brazil

Residence: San Jose, California

Post Office Address: 60 Descanso Drive #2219

San Jose, California 95134

Marcelo A. Oliveira 5/23/2008

Inventor's Signature Date

Motorola - Exhibit 1028 - Page 340

PTO/SB/14 (08-05)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	CPOL955474/CSCOP130US
	Application Number	
Title of Invention	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Applicant Information:

Applicant 1 Remove

Applicant Authority	◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Shmuel		Shaffer	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Palo Alto	State/Province	CA	Country of Residence i	US

Citizenship under 37 CFR 1.41(b) i: US

Mailing Address of Applicant:

Address 1	1211 Cowper Street		
Address 2			
City	Palo Alto	State/Province	CA
Postal Code	94301	Country i	US

Applicant 2 Remove

Applicant Authority	◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Amit		Barave	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Sunnyvale	State/Province	CA	Country of Residence i	US

Citizenship under 37 CFR 1.41(b) i: IN

Mailing Address of Applicant:

Address 1	953 South Wolfe Road		
Address 2			
City	Sunnyvale	State/Province	CA
Postal Code	94086	Country i	US

Applicant 3 Remove

Applicant Authority	◉ Inventor	○ Legal Representative under 35 U.S.C. 117	○ Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Steven		Christenson	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Campbell	State/Province	CA	Country of Residence i	US

PTO/SB/14 (08-05)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	CPOL955474/CSCOP130US
	Application Number	
Title of Invention	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION	

Citizenship under 37 CFR 1.41(b) i	US				
Mailing Address of Applicant:					
Address 1	1162 Bucknam Avenue				
Address 2					
City	Campbell	**State/Province**	CA		
Postal Code	95008	**Country**i	US		
Applicant 4				Remove	
Applicant Authority	(•) Inventor	( ) Legal Representative under 35 U.S.C. 117		( ) Party of Interest under 35 U.S.C. 118	
Prefix	**Given Name**	**Middle Name**	**Family Name**	**Suffix**	
	Marcelo		Oliveira		
Residence Information (Select One)	(•) US Residency	( ) Non US Residency	( ) Active US Military Service		
City	San Jose	**State/Province**	CA	**Country of Residence** i	US
Citizenship under 37 CFR 1.41(b) i	BR				
Mailing Address of Applicant:					
Address 1	60 Descanso Drive #2219				
Address 2					
City	San Jose	**State/Province**	CA		
Postal Code	95134	**Country**i	US		
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button.				Add	

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a).			
☐ **An Address is being provided for the correspondence Information of this application.**			
Customer Number	23623		
Email Address		Add Email	Remove Email

Application Information:

Title of the Invention	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION		
Attorney Docket Number	CPOL955474/CSCOP130US	**Small Entity Status Claimed**	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		**Sub Class (if any)**	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	11	**Suggested Figure for Publication (if any)**	1

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	CPOL955474/CSCOP130US
	Application Number	
Title of Invention	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION	

Publication Information:
☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)
☐ Request Not to Publish. I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application has not been and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Enter either Customer Number or complete the Representative Name section below. If both sections are completed the Customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ US Representative (37 CFR 11.9)
Customer Number	23623		

Domestic Priority Information:

This section allows for the applicant to claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c). Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.

Prior Application Status			Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)

Additional Domestic Priority Data may be generated within this form by selecting the **Add** button. Add

Foreign Priority Information:

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).

Remove

Application Number	Country [i]	Parent Filing Date (YYYY-MM-DD)	Priority Claimed
			○ Yes ◉ No

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button. Add

Assignee Information:

Providing this information in the application data sheet does not substitute for compliance with any requirement of part 3 of Title 37 of the CFR to have an assignment recorded in the Office.

Assignee 1 Remove

If the Assignee is an Organization check here. ☒

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	CPOL955474/CSCOP130US
	Application Number	
Title of Invention	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION	

Organization Name	Cisco Technology, Inc.		
Mailing Address Information:			
Address 1	170 West Tasman Drive		
Address 2			
City	San Jose	**State/Province**	CA
Country [i]	US	Postal Code	95134-1706
Phone Number		Fax Number	
Email Address			
Additional Assignee Data may be generated within this form by selecting the **Add** button.		Add	

Signature:

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.

Signature	/James J. Pingor/			Date (YYYY-MM-DD)	2008-05-27
First Name	James	Last Name	Pingor	Registration Number	51382

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

TITLE: INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION

BACKGROUND

[0001] Businesses around the world including public and private groups, such as security and safety personnel (*e.g.*, police, fire fighters and ambulance drivers) use communication networks that employ differing technologies and/or standards for communication. Many networks utilize land mobile radios communicating through push-to-talk technologies. However, communications among different endpoints of different networks such as endpoints that employ differing technologies and/or standards may be difficult. Collaboration between the different agencies and networks tends to be ad hoc and inefficient and involves laborious manual intervention.

[0002] Interoperability systems can employ an Internet protocol (IP) network collaboration platform that brings two-way radios into the realm of IP networking, offering all the benefits of this widely embraced, standards-based technology and extending the reach of two-way radios to other voice, video and data networks. Interoperability systems employ standards-based IP technologies to join various non-compatible communications systems into one, cohesive infrastructure. The interoperability system expects certain behavioral conformance from the end points in the system to maintain a consistent end user experience, such as, but not limited to, audio quality, number of active talkers in a group, or talk group features (*e.g.* floor control, priority, pre-emption, *etc.*). Endpoints developed and controlled by the interoperability system software can adhere to the expected behavioral characteristics. However, endpoints based on platforms external to the interoperability system cannot automatically conform to the expected characteristics. Further, endpoints that are not complying with the interoperability system behavior cannot respect floor control of the system. Such endpoints can lose out on talk group features, such as, talker-id. Furthermore, endpoints based on non- interoperability platforms can potentially abuse the system through intentional and/or unintentional rogue behavior.

BRIEF DESCRIPTION OF THE DRAWINGS

[0003] FIG. 1 illustrates a block diagram of an example system that can be employed to dynamically join various non-compatible communication systems into a cohesive infrastructure.

[0004] FIG. 2 illustrates an example endpoint that initiates a communication session according to an embodiment of the subject specification.

[0005] FIG. 3 illustrates an example interoperability system that can dynamically facilitate communication between non-compatible communication devices in accordance with embodiment of the specification.

[0006] FIG. 4 illustrates an example system that facilitates collection of information associated with an endpoint that initiates a communication session according to an embodiment of the subject specification.

[0007] FIG. 5 illustrates an example interoperability system that can dynamically determine where media processing can be performed in accordance with an embodiment of the specification.

[0008] FIG. 6 illustrates an example system that can be employed to communicate with an interoperability system according to an embodiment of the specification.

[0009] FIG. 7 illustrates an example flow chart of procedures that dynamically facilitate communication between non-compatible communication devices in accordance with embodiment of the specification.

[0010] FIG. 8 illustrates an example flow chart of procedures for dynamically communicating with a device in an interoperability communication system *via* a dynamic media proxy in accordance with the specification.

[0011] FIG. 9 illustrates an example flow chart of procedures that facilitate utilization of a dynamic media proxy, according to an embodiment of the subject specification.

[0012] FIG. 10 illustrates a block diagram of a computer operable to execute the disclosed architecture.

[0013] FIG. 11 illustrates a schematic block diagram of an exemplary computing environment in accordance with the subject specification.

Motorola - Exhibit 1028 - Page 347

DESCRIPTION OF EXAMPLE EMBODIMENTS

OVERVIEW

[0014] The following presents a simplified overview of the claimed subject matter in order to provide a basic understanding of some embodiments described herein. This is not an extensive overview of the claimed subject matter. It is intended to neither identify key or critical elements of the claimed subject matter nor to delineate the scope of that subject matter. Its sole purpose is to present some concepts of the claimed subject matter in a simplified form as a prelude to the more detailed description of example embodiments that is presented later.

[0015] The system disclosed and claimed herein, in one embodiment thereof, can dynamically facilitate communication between two or more non-compatible communication devices. The system can dynamically decide to act as a media proxy for a particular communication device and deliver full featured media services to the device. The decision to connect a device *via* a proxy can be made dynamically based on the capabilities of the communication devices and available system resources.

[0016] According to another embodiment of the system, an endpoint that initiates communication can include an information determination component that can determine media capabilities of the endpoint and/or the identity of the endpoint. Furthermore, a negotiation component can advertise the determined information and negotiate a session with an interoperability server (IS) over a private channel. The endpoint can communicate with the IS through custom messaging.

[0017] In accordance with another embodiment of the specification, an IS can include an information collection component that can collect information associated with an endpoint that initiates communication. The information can include media capabilities of the endpoint and/or its identity and/or attributes. A resource determination component can determine information associated with available system resources, for example, bandwidth and/or memory. The IS can further include an analysis component that can analyze the information associated with the endpoint and the system resources to determine if the endpoint can be connected to a VTG *via* a proxy. The analysis component can identify an endpoint that does not adhere to specific rules of transmission and can dynamically connect such an endpoint to a VTG *via* a proxy to prevent the endpoint from transmitting media into an active VTG that already has multiple talkers streaming media. A dynamic proxy component can

employ a proxy for the endpoint based on the analysis and dynamically establish a path for communication.

[0018] Another embodiment of the claimed subject matter relates to a system that can dynamically determine where media processing can be performed in an interoperability system. The determination can be based in part on the available system resources and/or the media capabilities of the endpoints that are joining a virtual talk group (VTG).

[0019] In accordance with yet another embodiment of the specification, the system can asses a security risk associated with allowing a particular endpoint to join a VTG directly. If the identity of the endpoint cannot be validated as trusted and/or secure, the system can either reject the communication request or act as a proxy for the endpoint and join the VTG on behalf of the endpoint. Thus, the system can access control over potential rogue endpoints. The parameters of the VTG can be dynamically altered to conceal the VTG from an identified rogue endpoint, preventing the endpoint from streaming media into the VTG.

[0020] The following description and the annexed drawings set forth in detail certain illustrative embodiments of the claimed subject matter. These embodiments may be indicative, however, of but a few of the various ways in which the principles of the claimed subject matter may be employed and the claimed subject matter is intended to include many and/or all such embodiments and their equivalents. Other advantages and novel features of the claimed subject matter will become apparent from the following description of example embodiments when considered in conjunction with the drawings.

[0021] The following terms are used throughout the description, the definitions of which are provided herein to assist in understanding various embodiments of the subject specification. The specification is now described with reference to the drawings, wherein like reference numerals are used to refer to like elements throughout. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the subject specification. It may be evident, however, that the specification can be practiced without these specific details. In other instances, well-known structures and devices are shown in block diagram form in order to facilitate describing the specification.

[0022] As used in this application, the terms "component" and "system" are intended to refer to an entity capable of processing information (*e.g.*, computer-related entity), either hardware, a combination of hardware and software, software, or software in execution. For example, a component can be, but is not limited to being, a process running on a processor, a processor, an object, an executable, a thread of execution, a program, and/or a computer. By way of illustration, both an application running on a server and the server can be a component. One or more components can reside within a process and/or thread of execution, and a component can be localized on one computer and/or distributed between two or more computers.

[0023] As used herein, the term to "infer" or "inference" refer generally to the process of reasoning about or inferring states of the system, environment, and/or user from a set of observations as captured *via* events and/or data. Inference can be employed to identify a specific context or action, or can generate a probability distribution over states, for example. The inference can be probabilistic–that is, the computation of a probability distribution over states of interest based on a consideration of data and events. Inference can also refer to techniques employed for composing higher-level events from a set of events and/or data. Such inference results in the construction of new events or actions from a set of observed events and/or stored event data, whether or not the events are correlated in close temporal proximity, and whether the events and data come from one or several event and data sources.

[0024] Furthermore, the claimed subject matter may be implemented as a method, apparatus, or article of manufacture using standard programming and/or engineering techniques to produce software, firmware, hardware, or any combination thereof to control a computer to implement the disclosed subject matter. The term "article of manufacture" as used herein is intended to encompass a computer program accessible from any computer-readable device, carrier, or media. For example, computer readable media can include but are not limited to magnetic storage devices (*e.g.*, hard disk, floppy disk, magnetic strips…), optical disks (*e.g.*, compact disk (CD), digital versatile disk (DVD)…), smart cards, and flash memory devices (*e.g.*, card, stick, key drive…). Additionally it should be appreciated that a carrier wave can be employed to carry computer-readable electronic data such as those used in transmitting and receiving electronic mail or in accessing a network such as the Internet or a local area network (LAN). Of course, those skilled in the art will

recognize many modifications may be made to this configuration without departing from the scope or spirit of the claimed subject matter.

[0025] The system disclosed herein, relates to interoperability systems that can dynamically insert a media proxy based on capability negotiation, according to an embodiment of the invention. Conventional systems expect certain behavioral conformance from end points, such as but not limited to, RTCP (Real Time Transport Control Protocol) support, active stream selection, *etc.* and provide statically configured proxies to enable communication. Further, conventional systems cannot provide an access control over potential malicious endpoints.

[0026] The subject disclosure relates generally to communication networks and in particular to an interoperability system that facilitates a dynamic insertion of a media proxy based on capability negotiation. The subject specification provides a system and methodology that may support endpoints that are not compliant with an interoperability system behavior and can asses the security risk is allowing endpoints to join a talk group. Further, the system can dynamically proxy such endpoints and optimize system resource utilization.

[0027] Referring initially to the drawings, FIG. 1 illustrates a system 100 that can be employed to dynamically join various non-compatible communication systems into one, cohesive infrastructure. As an example, the system 100 can allows users of two-way radios, often called push-to-talk radios, and other voice devices, such as cell phones and regular telephones, to directly communicate and collaborate. In one embodiment, the system 100 can include an interoperability server (IS) 102, endpoints 104 and communication networks 106 that can be connected through a network 108.

[0028] The IS 102 can facilitate communication between different non-compatible communication devices, such as endpoints 104. As an example, IS 102 can facilitate communications between a two-way radio and a mobile device. Though two-way radios offer an excellent way for mobile workers within a limited geographic area to communicate, most two-way radio systems cannot interact with any other communications system since they use non-compatible technologies. In another example embodiment, IS 102 can facilitate communication between users of UHF radios and VHF radios or amongst users who use different channels on the same frequency band (*e.g.*, VHF). In other instances, radios signals cannot reach certain areas because of interference or physical barriers, cutting off radio users from the rest of the team or organization. IS 102 can connect two-way radios to other networks, for

example, by employing IP (internet protocol) technology standards, and help extend their reach. Thus, IS 102 can bring non-compatible communication devices, such as, push-to-talk (PTT) radios, into a dynamic, real-time, and information-rich collaboration environment and can allow an entity to communicate with a PPT radio with another communication device.

[0029] According to an embodiment, IS 102 can employ a system approach to offer a framework based on IP services to provide and maintain a consistent end user experience and data interoperability among endpoints 104 of networks 106 that employ different technologies. IS 102 can allow endpoints 104 to participate in one or more communication sessions based on capability negotiation. The endpoints 104 can initiate a communication session and advertise its capabilities to the IS 102. The IS 102 can then determine if the endpoint 104 can be allowed to join a talk group based on the information collected about the endpoint 104. Furthermore, the IS 102 determines if the endpoint 104 can directly connect to the talk group or if it should be connected *via* a proxy. The IS 102 can dynamically proxy the endpoint 104 based on information regarding the endpoint 104 and information regarding resources of the system (*e.g.* bandwidth, memory) and/or specific transmission rules based on the number of active media streams in a virtual talk group.

[0030] Endpoints 104 can include, but are not limited to, non-compatible communication devices that can participate in a communication session, such as, PTT radios, IP phones, personal digital assistants (PDAs), personal computers, land mobile radios (LMR), and the like. A communication session can be an active communication between two or more endpoints 104, for example, a communication session can occur between endpoint 1 and endpoint N. The data communicated during the communication session can be most any format of data, such as, but not limited to, voice, text, audio, video, multimedia, control, other information or a combination thereof. It can be appreciated that although N endpoints are illustrated in the figure, namely, endpoint 1 to endpoint N (where N is a natural number from 1 to infinity), most any number of endpoints can be connected to network 108 and/or to networks 106. Endpoints 104 that are not compliant with the communication networks 106 can employ IS 102 to leverage features of the networks 106.

[0031] System 100 can include one or more communication networks 106. The networks 106 can include, but are not limited to, IP, non-IP, wireless or wired networks and can be distributed locally or across multiple geographic locations. As

an example, networks 106 can include, a local area network (LAN), a wide area network (WAN), a metropolitan area network (MAN), a cellular network, a public switched telephone network (PSTN), a public or private network, a land mobile radios (LMR) network, a satellite network, an internet network or any combination thereof.

[0032] Referring now to Figure 2, there is illustrated an example endpoint 104 in accordance with an embodiment of the specification. As discussed *supra*, the endpoint 104 can be a non-compatible communication device, such as, but not limited to, a telephone, a cellular phone, an IP phone, a PDA, a fax machine, a PC, a camera, a camcorder, an LMR, a software radio, such as, Push-to-Talk Management Center (PMC) or the like. According to an embodiment of the subject specification, the endpoint 104 can include an information determination component 202 that can be employed to determine information related to the endpoint 104.

[0033] In one embodiment, the information determination component 202 can include a capability determination component 204 and/or an identity determination component 206. The capability determination component 204 can determine media capabilities associated with the endpoint 104, such as, but not limited to, the supported control protocol(s) or the number of incoming streams per talk group or channel supported by the endpoint 104. Further, the identity determination component 206 can determine an identity associated with the endpoint 104, such as a talker-id, or IP address. In another example embodiment, the identity of the endpoint can provide the name of the manufacturer and can indicate the capabilities of the said endpoint.

[0034] The endpoint 104 can further include a negotiation component 208 that can be employed to negotiate capabilities of the endpoint 104 with an IS 102 (FIG. 1). The negotiation component 208 can advertise media capabilities and/ or the identity associated with the endpoint 104 as determined by the information determination component 202. More specifically, the negotiation component 208 can determine if the endpoint 104 has initiated a communication and would like to participate in a virtual talk group (VTG). The negotiation component 208 can negotiate a session with an IS 102 (FIG. 1) over a private unicast and/or multicast channel. Further, the negotiation component 208 can present determined and/or identified capabilities and/or identity associated with the endpoint 104. Based on the information provided by the negotiation component 208, the IS 102 (FIG. 1) can determine if the endpoint 104 should be allowed to join the VTG and also determine if the endpoint should be

directly connected to the VTG or should be connected *via* a proxy based in part on the system's 100 (FIG. 1) floor control policy. Furthermore, the IS 102 (FIG. 1) can determine if the endpoint 104 adheres to the rules of transmission. If the endpoint 104 does not adhere to rules of transmission, it can be dynamically connected to the VTG *via* a proxy to prevent transmitting media into an active VTG that already has multiple talkers streaming media into it, and thus rendering the VTG useless. In an example embodiment, if the endpoint 104 is admitted into a VTG without proper credentials, it can be continuously monitored by other endpoints for its adherence with system's floor control policy. If another endpoint identifies the monitored endpoint as non-conforming with the floor control policy of the system, the IS 102 (FIG. 1) can dynamically insert a proxy between the endpoint 104 and the VTG. In addition, the parameters of the VTG can be dynamically altered to conceal the VTG from the identified endpoint and prevent it from streaming into the VTG.

[0035] As an example, the endpoint 104 can be an IP phone in accordance with an embodiment of the specification. The IP phone can initiate a communication with another endpoint, such as a cellular phone that is part of a VTG. The information determination component 202 can identify the capabilities associated with the IP phone, such as, built in media termination, multicast stack support, Extensible Markup Language (XML) services. Further, the information determination component 202 can determine that the IP phone does not support RCTP. The negotiation component 208 can negotiate a session with the IS (FIG. 1) over a private unicast/multicast channel and can present the identity and capability of the IP phone to the IS FIG. 1) over the private channel employing custom messages. The IS (FIG. 1) can then proxy for the IP phone since the IP phone does not support RTCP. The IP phone can transfer traffic over the private channel to the IS (FIG. 1), which can stream the traffic to the VTP and vice versa. Alternately or in addition, the information determination component 202 can determine that the IP phone does not adhere to the limit of a specified number of multicast streams per VTG and the IS FIG. 1) can connect the IP phone to the VTG *via* a proxy. Since the proxy is a trusted component, the proxy can refrain from streaming media into a VTG which already has a maximum number of active media streams as specified by the specific rules of transmission.

[0036] FIG. 3 illustrates an example IS 102 in accordance with embodiment of the specification. The IS 102 can be employed to facilitate communication between

different non-compatible communication devices. Additionally, the IS 102 can be employed to assess security risks associated with a particular endpoint and also be employed to optimize system resources during communication sessions.

[0037] In an embodiment, the IS 102 can include an information collection component 302 that can determine information regarding an endpoint that has initiated a communication session. The information collection component 302 can collect information from the endpoint through custom messages over a private channel. The information can include, but is not limited to, media capabilities of the endpoint, the identity of the endpoint and/or attributes of the endpoint.

[0038] The IS 102 can further include a resource determination component 304 that can determine available system resources, *e.g.* bandwidth, and/or memory. The system resource information can be employed to optimize resource utilization, for example, by load sharing. The resource determination component 304 can dynamically update the system resource information, such that the IS 102 has up-to-date information regarding the availability of system resources. The information regarding the available system resources can be employed to negotiate the dynamic utilization of a proxy for a particular endpoint and establish a communication path based on the resource information and/or the capability information.

[0039] The information collected by the information collection component 302 and the information determined by resource determination component 304 can be analyzed by an analysis component 306. The analysis component 306 can determine if the endpoint can provide the quality of service required in the VTG based on the analysis of the capabilities of the endpoint. In one embodiment, the analysis component 306 can detect an endpoint which may not adhere to the rules of transmission based on collected information. In one embodiment, the analysis component 306 can analyze the information to decide if the requesting endpoint can be allowed to join the VTG and further determine if the endpoint can join the VTG directly.

[0040] The analysis component 306 can validate the endpoint identity as secured and/or trusted and determine if the requesting endpoint is a trusted endpoint or potentially a rouge endpoint. It can be appreciated that the analysis component 306 can also identify a malicious endpoint by validating the endpoint identity as malicious. If the requesting endpoint is identified as malicious, the analysis component 306 can reject the request for communication from the endpoint. Further,

the analysis component 306 can determine if a non malicious endpoint can join a VTG directly.

[0041] The analysis component 306 can analyze the capabilities of the endpoint (determined by the information collecting component 302) to determine if the endpoint should be connected *via* a proxy. If the capabilities are analyzed to be non-conforming to the IS 102, a dynamic proxy component 308 is employed to proxy the endpoint. It can be appreciated that the dynamic proxy component 308 and the IS 102 can reside on the same or on different servers. Logically, the IS 102 can facilitate the creation and maintenance of the VTG as it is responsible for the control signals and the dynamic proxy component 308 can deal with a media component (not shown). Thus, although the dynamic proxy component 308 is depicted as a part of the IS 102, it can be appreciated that the dynamic proxy component can reside on a separate server. In one embodiment, the IS 102 can be attached to network 106 (or 108) while the dynamic proxy may be attached to another network 108 (or 106).

[0042] If the analyzed capabilities conform to the IS, the endpoint can be allowed to directly join the VTG. As an example, if the analysis component 306 determines that the requesting endpoint does not support RTCP, the IS 102 can proxy the endpoint. In an embodiment, if the analyzed capabilities cannot confirm that the endpoint would prevent media streaming into a multicast address, which already has a maximum number of active media streams, the IS 102 can connect the endpoint *via* a dynamic proxy. Furthermore, the analysis component 306 dynamically determines if a proxy can be utilized based on the system resource information provided by the resource determination component 304. The analysis component 306 can additionally employ machine learning to facilitate automating one or more features in accordance with the subject specification.

[0043] The subject specification (*e.g.*, in connection with validation of an endpoint to join a VTG) can employ various AI-based schemes for carrying out various embodiments thereof. For example, a process for determining if an endpoint can directly join a VTG can be facilitated *via* an automatic classifier system and process. Moreover, where the endpoint requests to join a particular VTG, the classifier can be employed to determine if the endpoint can be allowed to join the VTG and/or the endpoint can be allowed to join the VTG directly.

[0044] A classifier is a function that maps an input attribute vector, x = (x1, x2, x3, x4, *xn*), to a confidence that the input belongs to a class, that is, f(x) =

confidence(*class*). Such classification can employ a probabilistic and/or statistical-based analysis (*e.g.*, factoring into the analysis utilities and costs) to prognose or infer an action that a user desires to be automatically performed. In the case of interoperability systems, for example, attributes can be capabilities and/or identity of the endpoint or other data-specific attributes derived from the capabilities and/or identity, and the classes can be categories or areas of interest. In one example embodiment, the classification is made base on the sub-network to which the endpoint is attached.

[0045] A support vector machine (SVM) is an example of a classifier that can be employed. The SVM operates by finding a hypersurface in the space of possible inputs, which the hypersurface attempts to split the triggering criteria from the non-triggering events. Intuitively, this makes the classification correct for testing data that is near, but not identical to training data. Other directed and undirected model classification approaches include, *e.g.*, naïve Bayes, Bayesian networks, decision trees, neural networks, fuzzy logic models, and probabilistic classification models providing different patterns of independence can be employed. Classification as used herein also is inclusive of statistical regression that is utilized to develop models of priority.

[0046] As will be readily appreciated from the subject specification, the subject specification can employ classifiers that are explicitly trained (*e.g.*, *via* a generic training data) as well as implicitly trained (*e.g.*, *via* observing user behavior, receiving extrinsic information). For example, SVM's are configured *via* a learning or training phase within a classifier constructor and feature selection module. Thus, the classifier(s) can be used to automatically learn and perform a number of functions, including but not limited to determining according to a predetermined criteria. Referring back to FIG. 3, the IS 102 can include a dynamic proxy component 308 that can be dynamically employed to proxy the endpoint based on the analysis performed by the analysis component 306. The dynamic proxy component 308 can communicate with the endpoint through a private session and join the VTG on behalf of the endpoint. Thus, the dynamic proxy component 308 can establish a communication path based on capability negotiation. The dynamic proxy component 308 can behave as a fully-compliant endpoint and relay relevant information and/or features to the endpoint for which it serves as a proxy through custom messaging. Additionally, the dynamic proxy component 308 can provide talk group features, such

as, but not limited to, floor control, talker-id, priority and/or pre-emption on behalf of the endpoint. In one embodiment, if the endpoint is admitted into a VTG without proper credentials, it can be continuously monitored by other endpoints for its adherence with system's floor control policy. If another endpoint identifies that the monitored endpoint as non-conforming with the floor control policy of the system, the dynamic proxy component 308 can dynamically insert a proxy between the endpoint 104 and the VTG.

[0047] As an example, if an IP phone initiated a connection to a specific VTG, the information collection component 302 can collect information regarding the IP phone and determine that the IP phone cannot offer full featured RTCP support, talker –id, priority or pre-emption features. The analysis component 306 can determine that the IP phone should be connected to the VTG *via* a proxy based in part on the information associated with system resources. The dynamic proxy component 308 can then join the intended VTG on behalf of the IP phone. The audio traffic from the IP phone can be received by the dynamic proxy component 308 over a private channel and can be streamed to the intended VTG and vice versa. The dynamic proxy component 308 can preempt the IP phone and prevent the media stream from the IP phone to be streamed into the VTG based on an analysis by the IS 102.

[0048] Referring now to FIG. 4, there is illustrated an example system 400 that facilitates collection of information associated with an endpoint that initiates a communication session. The example information collection component 302 depicted in the system can be employed to gather, identify and/or determine information advertised by an endpoint. The information collection component 302 can generally include a capability collection component 402 that can be employed to determine information regarding media capabilities of a requesting endpoint. The media capabilities can include behavioral characteristics, such as, but are not limited to, RTCP support, the ability to detect that other members of the VTG are speaking and consequently not streaming media into the said VTG, active stream selection, and/or talk group features. The system 400 can dynamically employ a proxy for the endpoint if the capabilities of the said endpoint are determined to be non-conforming to IS standards.

[0049] The information collection component 302 can also include an identity collection component 404 that can be employed to determine the identity of the requesting endpoint. The identity of the endpoint can be employed to validate the

security of the endpoint. Further, an attribute collection component 406 can collect attributes associated with the endpoint from the packets sent by the endpoint. If the identity of the endpoint is not determined, the information from the attributes can be utilized to verify the security of the endpoint. As an example, the attribute can include security credentials of the endpoint.

[0050] FIG. 5 illustrates an example system 500 that can dynamically determine where media processing can be performed in an interoperability system. The system 500 can include an IS 102 that can facilitate communication between communication devices that employ non-compatible technologies for communication. For example, user 1 and user 2 can employ two-way radios while user 3 can employ a handheld device, such as a cellular phone. It can be appreciated that user1, user 2 and user 3 can employ most any communication device including, but not limited to, a telephone, a mobile phone, a PMC, an IP phone, a PDA, a fax machine, a PC, a camera, a video camera, a LMR or a combination thereof. Furthermore, it can be appreciated that although only three users are illustrated in the figure, two or more users can employ the disclosed system.

[0051] As an example, a scenario wherein user 3 from domain 2 wants to communicate with two users from domain 1 (user1 and user 2) can be described with respect to FIG. 5. The user 3 can initiate communication through a hand held device, such as an IP phone. The users in domain 1 employ different standards for communication as the user in domain 2. When a user joins a VTG, the location and resources on an endpoint employed by the user are considered. During communication, user 1 and user 2 from domain 1 can stream media from domain 1 to domain 2. This can be achieved in two ways, namely, transfer the two media streams from domain 1 to domain 2 & mix them in the endpoint (*e.g.* IP phone) or utilize a proxy in domain 1 that can process the media streams in domain 1 and transfer a single media stream to domain 2. The IS 102 can determine the location where media processing can occur, for example, by an analysis component 306 (FIG. 3). The IS 102 determines the available system resources (*e.g.* by a resource determination component shown in FIG. 3) and capabilities of the devices employed by the users (*e.g.* by an information collection component shown in FIG. 3) to determine an optimal location for media processing. For example, if current available bandwidth is low, the IS 102 can utilize a proxy to process the media streams from user 1 and user 2 in domain 1 and transfer a single media stream to user 3 in domain 2. Furthermore,

the dynamic proxy component 308 (FIG. 3), in the IS 102, can monitor the IP multicast address/port and determine if there are other active media streams on the multicast address. If the analysis component 306 (FIG. 3), in the IS 102, detects more than a maximum specified number of active media steams on the multicast address, the dynamic proxy component 308 (FIG. 3) can back up and refrain from transmitting media to the multicast address. If user 3 does not adhere to the specified transmission rule, it can transmit media into an already busy VTG. The analysis component 306(FIG. 3) can check if user 3 has the capability to adhere to the specified rule. If the IS 102 cannot ensure that the user 3 would adhere to the said rule, the IS 102 can connect the user 3 to the VTG *via* a proxy. Since the proxy is a trusted component, it would refrain from streaming media into an active VTG which already has a maximum number of active media streams.

[0052] Referring now to FIG. 6, there is illustrated an example system 600 that can be employed to communicate with an interoperability system. In an embodiment, the system 600 can include most any device or system, such as, endpoint 104 that can be employed for communication. The endpoint 104 can support half duplex and/or full duplex communication.

[0053] The endpoint 104 can generally include a user interface 602 that can be employed by an entity, such as a user to initiate or receive communication. The user interface can include a speaker, a microphone, a visual display, a keypad or a combination thereof. The keypad may include HW buttons and/or menu driven soft buttons. The endpoint 104 can further include a processor 604 that can perform operations within the endpoint 104 and a memory 606 that can store information within the endpoint 104. Furthermore, the endpoint 104 can include an information determination component 202 that can be employed to identify information associated with the endpoint 104, such as capability information and/or identity information. A negotiation component 208 can be employed to exchange capability information with an interoperability server (not shown) during communication. It is to be appreciated that information determination component 202 and negotiation component 208 can be the same or similar as, and/or can contain the same or similar functionality as illustrated in Figure 2 and other figures and described herein.

[0054] A transmitter/receiver 608 can be employed to transmit and receive data from/to the endpoint 104. It can be appreciated that the transmitter and receiver can be separate modules or integrated as a single module. The transmitter/ receiver

Motorola - Exhibit 1028 - Page 360

608 can transmit information determined by the information collection component 202 to an interoperability server (not shown) over a private channel to initiate communication. The transmitter/receiver 608 can employ wireless and/or wired communication to transmit/receive information.

[0055] FIG. 7 illustrates an example methodology 700 that can facilitate dynamic communication between non-compatible communication devices in accordance with embodiment of the specification. While, for purposes of simplicity of explanation, the one or more methodologies shown herein, *e.g.*, in the form of a flow chart, are shown and described as a series of acts, it is to be understood and appreciated that the subject specification is not limited by the order of acts, as some acts may, in accordance with the specification, occur in a different order and/or concurrently with other acts from that shown and described herein. For example, those skilled in the art will understand and appreciate that a methodology could alternatively be represented as a series of interrelated states or events, such as in a state diagram. Moreover, not all illustrated acts may be required to implement a methodology in accordance with the specification.

[0056] Referring back to FIG. 7, a communication between devices can be initiated at 702. The devices can employ non-compatible technologies and/or standards for communication. At 704, media capabilities and/or identity of the device that initiated communication can be advertised. At 706, a decision can be made if the device is allowed to join a VTG based on its identity. If the device identity is determined to be untrusted or malicious the device cannot be allowed to join the VTG and the request can be rejected at 708. If the device identity is determined to be trusted or safe, it can be determined if the device should join *via* proxy, as shown at 710. The determination at 710 can be based on the media capabilities of the device and the available system resources. If it is determined that the device does not need to join *via* proxy since the device can adhere to the behavioral characteristics of an interoperability system, such as but not limited to, transmission rules, the device can be directly connected to the VTG, as shown at 712. However, if the device demonstrates that it cannot comply with the behavioral characteristics of the interoperability system, the device can be attached to a VTG *via* a proxy. In one embodiment, if it cannot be determined that the endpoint can adhere to specified rules of transmission, the endpoint can be connected to the VTG *via* a proxy. At 714, a dynamic proxy can be employed for attaching the endpoint device to the VTG. In one

embodiment, if the endpoint is admitted into a VTG without proper credentials, it can be monitored for its adherence with a floor control policy, such as a specified rule of transmission. If it is identified that the monitored endpoint is non-conforming with the floor control policy, a proxy can dynamically be inserted between the endpoint and the VTG.

[0057] At 716, a dynamic path can be established for communication from the endpoint device to the dynamic proxy and the proxy to the intended device in the VTG. The dynamic path can be based on the available system resources, such as, but not limited to, memory and/or bandwidth.

[0058] Referring now to FIG. 8, there is illustrated an example methodology 800 of communicating with a device in an interoperability communication system *via* a dynamic media proxy in accordance with the specification. At 802, communication with a non-compatible communication device(s) can be initiated. At 804, media capability information associated with the initiating device can be determined. At 806, an identity of the initiating device can be determined. At 808, it can be determined if a proxy is employed to attach the initiating device to the given VTG. If a proxy is not employed to attach the endpoint device to the given VTG, media can be transmitted directly to a VTG at 810. Thus, the initiating device can directly communicate with an indented device in the VTG. If it is determined that the proxy is employed to attach the endpoint device to the given VTG, media can be transmitted to the proxy over a private network through custom messages at 812.

[0059] FIG. 9 illustrates an example methodology of utilizing a dynamic media proxy in accordance with the specification. At 902, a communication request can be received. The request can be from most any endpoint (*e.g.* PTT radio) to initiate communication with another endpoint (*e.g.* cellular phone). At 904, information associated with the requesting endpoint can be dynamically determined. The information can include, but is not limited to, media capabilities, device identity attributes associated with the device and/or the device's capability to adhere to a specified transmission rule. At 906, system resource information, such as, but not limited to, bandwidth, memory and/or number of active media streams can be collected. At 908, the collected information can be analyzed. At 910 a dynamic media proxy can be utilized to facilitate communication between non-compatible communication devices based on the collected information. In one embodiment, the VTG can be monitored for number of active media streams and media transmission

between the endpoint can be established *via* a proxy if a maximum number of active media streams are detected and it is determined that the endpoints do not adhere to the transmission rule.

[0060] Referring now to FIG. 10, there is illustrated a block diagram of a computer operable to execute the disclosed architecture that can be employed to join various non-compatible communications systems into a cohesive infrastructure by employing a dynamic media proxy based on capability negotiation. In order to provide additional context for various embodiments of the subject specification, FIG. 10 and the following discussion are intended to provide a brief, general description of a suitable computing environment 1000 in which the various embodiments of the specification can be implemented. While the specification has been described above in the general context of computer-executable instructions that may run on one or more computers, those skilled in the art will recognize that the specification also can be implemented in combination with other program modules and/or as a combination of hardware and software.

[0061] Generally, program modules include routines, programs, components, data structures, *etc*., that perform particular tasks or implement particular abstract data types. Moreover, those skilled in the art will appreciate that the inventive methods can be practiced with other computer system configurations, including single-processor or multiprocessor computer systems, minicomputers, mainframe computers, as well as personal computers, hand-held computing devices, microprocessor-based or programmable consumer electronics, and the like, each of which can be operatively coupled to one or more associated devices.

[0062] The illustrated embodiments of the specification may also be practiced in distributed computing environments where certain tasks are performed by remote processing devices that are linked through a communications network. In a distributed computing environment, program modules can be located in both local and remote memory storage devices.

[0063] A computer includes a variety of computer-readable media. Computer-readable media can be any available media that can be accessed by the computer and includes both volatile and nonvolatile media, removable and non-removable media. By way of example, and not limitation, computer-readable media can comprise computer storage media and communication media. Computer storage media includes both volatile and nonvolatile, removable and non-removable media

Motorola - Exhibit 1028 - Page 363

implemented in any method or technology for storage of information such as computer-readable instructions, data structures, program modules or other data. Computer storage media includes, but is not limited to, RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disk (DVD) or other optical disk storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to store the desired information and which can be accessed by the computer.

[0064] Communication media embodies computer-readable instructions, data structures, program modules or other data in a modulated data signal such as a carrier wave or other transport mechanism, and includes any information delivery media. The term "modulated data signal" means a signal that has one or more of its characteristics set or changed in such a manner as to encode information in the signal. By way of example, and not limitation, communication media includes wired media such as a wired network or direct-wired connection, and wireless media such as acoustic, RF, infrared and other wireless media. Combinations of the any of the above should also be included within the scope of computer-readable media.

[0065] With reference again to FIG. 10, the example environment 1000 for implementing various embodiments of the specification includes a computer 1002, the computer 1002 including a processing unit 1004, a system memory 1006 and a system bus 1008. The system bus 1008 couples system components including, but not limited to, the system memory 1006 to the processing unit 1004. The processing unit 1004 can be any of various commercially available processors. Dual microprocessors and other multi-processor architectures may also be employed as the processing unit 1004. In some embodiments, the processor unit 1004 can include a digital signal processor (DSP).

[0066] The system bus 1008 can be any of several types of bus structure that may further interconnect to a memory bus (with or without a memory controller), a peripheral bus, and a local bus using any of a variety of commercially available bus architectures. In some embodiments, the bus can be a fast network resulting in a distributed components attached to the network. The system memory 1006 includes read-only memory (ROM) 1010 and random access memory (RAM) 1012. A basic input/output system (BIOS) is stored in a non-volatile memory 1010 such as ROM, EPROM, EEPROM, which BIOS contains the basic routines that help to transfer

information between elements within the computer 1002, such as during start-up. The RAM 1012 can also include a high-speed RAM such as static RAM for caching data.

[0067] The computer 1002 further includes an internal hard disk drive (HDD) 1014 (*e.g.*, EIDE, SATA), which internal hard disk drive 1014 may also be configured for external use in a suitable chassis (not shown), a magnetic floppy disk drive (FDD) 1016, (*e.g.*, to read from or write to a removable diskette 1018) and an optical disk drive 1020, (*e.g.*, reading a CD-ROM disk 1022 or, to read from or write to other high capacity optical media such as the DVD). The hard disk drive 1014, magnetic disk drive 1016 and optical disk drive 1020 can be connected to the system bus 1008 by a hard disk drive interface 1024, a magnetic disk drive interface 1026 and an optical drive interface 1028, respectively. The interface 1024 for external drive implementations includes at least one or both of Universal Serial Bus (USB) and IEEE 1394 interface technologies. Other external drive connection technologies are within contemplation of the subject specification.

[0068] The drives and their associated computer-readable media provide nonvolatile storage of data, data structures, computer-executable instructions, and so forth. For the computer 1002, the drives and media accommodate the storage of any data in a suitable digital format. Although the description of computer-readable media above refers to a HDD, a removable magnetic diskette, and a removable optical media such as a CD or DVD, it should be appreciated by those skilled in the art that other types of media which are readable by a computer, such as zip drives, magnetic cassettes, flash memory cards, cartridges, and the like, may also be used in the example operating environment, and further, that any such media may contain computer-executable instructions for performing the methods of the specification.

[0069] A number of program modules can be stored in the drives and RAM 1012, including an operating system 1030, one or more application programs 1032, other program modules 1034 and program data 1036. All or portions of the operating system, applications, modules, and/or data can also be cached in the RAM 1012. It is appreciated that the specification can be implemented with various commercially available operating systems or combinations of operating systems.

[0070] A user can enter commands and information into the computer 1002 through one or more wired/wireless input devices, *e.g.*, a keyboard 1038 and a pointing device, such as a mouse 1040. Other input devices (not shown) may include a microphone, an IR remote control, a joystick, a game pad, a stylus pen, touch

screen, or the like. These and other input devices are often connected to the processing unit 1004 through an input device interface 1042 that is coupled to the system bus 1008, but can be connected by other interfaces, such as a parallel port, an IEEE 1394 serial port, a game port, a USB port, an IR interface, *etc*.

[0071] A monitor 1044 or other type of display device is also connected to the system bus 1008 *via* an interface, such as a video adapter 1046. In addition to the monitor 1044, a computer includes other peripheral output devices (not shown), such as speakers, printers, *etc*.

[0072] The computer 1002 may operate in a networked environment using logical connections *via* wired and/or wireless communications to one or more remote computers, such as a remote computer(s) 1048. The remote computer(s) 1048 can be a workstation, a server computer, a router, a personal computer, endpoint device, portable computer, microprocessor-based entertainment appliance, a peer device or other common network node, and includes many or all of the elements described relative to the computer 1002, although, for purposes of brevity, only a memory/storage device 1050 is illustrated. The logical connections depicted include wired/wireless connectivity to a local area network (LAN) 1052 and/or larger networks, *e.g.*, a wide area network (WAN) 1054. Such LAN and WAN networking environments are commonplace in offices and companies, and facilitate enterprise-wide computer networks, such as intranets, all of which may connect to a global communications network, *e.g.*, the Internet.

[0073] When used in a LAN networking environment, the computer 1002 is connected to the local network 1052 through a wired and/or wireless communication network interface or adapter 1056. The adapter 1056 may facilitate wired or wireless communication to the LAN 1052, which may also include a wireless access point disposed thereon for communicating with the wireless adapter 1056.

[0074] When used in a WAN networking environment, the computer 1002 can include a modem 1058, or is connected to a communications server on the WAN 1054, or has other means for establishing communications over the WAN 1054, such as by way of the Internet. The modem 1058, which can be internal or external and a wired or wireless device, is connected to the system bus 1008 *via* the serial port interface 1042. In a networked environment, program modules depicted relative to the computer 1002, or portions thereof, can be stored in the remote memory/storage device 1050. It will be appreciated that the network connections shown are example

and other means of establishing a communications link between the computers can be used.

[0075] The computer 1002 is operable to communicate with any wireless devices or entities operatively disposed in wireless communication, *e.g.*, a printer, scanner, desktop and/or portable computer, portable data assistant, communications satellite, any piece of equipment or location associated with a wirelessly detectable tag (*e.g.*, a kiosk, news stand, restroom), and telephone. This includes at least Wi-Fi and Bluetooth™ wireless technologies. Thus, the communication can be a predefined structure as with a conventional network or simply an ad hoc communication between at least two devices.

[0076] Wi-Fi, or Wireless Fidelity, allows connection to the Internet from a couch at home, a bed in a hotel room, or a conference room at work, without wires. Wi-Fi is a wireless technology similar to that used in a cell phone that enables such devices, *e.g.*, computers, to send and receive data indoors and out; anywhere within the range of a base station. Wi-Fi networks use radio technologies called IEEE 802.11 (a, b, g, *etc.*) to provide secure, reliable, fast wireless connectivity. A Wi-Fi network can be used to connect computers to each other, to the Internet, and to wired networks (which use IEEE 802.3 or Ethernet). Wi-Fi networks operate in the unlicensed 2.4 and 5 GHz radio bands, at an 11 Mbps (802.11a) or 54 Mbps (802.11b) data rate, for example, or with products that contain both bands (dual band), so the networks can provide real-world performance similar to the basic 10BaseT wired Ethernet networks used in many offices.

[0077] Referring now to FIG. 11, there is illustrated a schematic block diagram of an exemplary computing environment 1100 that can facilitate communication between non-compatible communication devices in accordance with embodiment of the specification. The system 1100 includes one or more client(s) 1102. The client(s) 1102 can be hardware and/or software (*e.g.*, threads, processes, computing devices). The client(s) 1102 can house cookie(s) and/or associated contextual information by employing the subject specification, for example.

[0078] The system 1100 also includes one or more server(s) 1104. The server(s) 1104 can also be hardware and/or software (*e.g.*, threads, processes, computing devices). The servers 1104 can house threads to perform transformations by employing the specification, for example. One possible communication between a client 1102 and a server 1104 can be in the form of a data packet adapted to be

transmitted between two or more computer processes. The data packet may include a cookie and/or associated contextual information, for example. The system 1100 includes a communication framework 1106 (*e.g.*, a global communication network such as the Internet) that can be employed to facilitate communications between the client(s) 1102 and the server(s) 1104.

[0079] Communications can be facilitated *via* a wired (including optical fiber) and/or wireless technology. The client(s) 1102 are operatively connected to one or more client data store(s) 1108 that can be employed to store information local to the client(s) 1102 (*e.g.*, cookie(s) and/or associated contextual information). Similarly, the server(s) 1104 are operatively connected to one or more server data store(s) 1110 that can be employed to store information local to the servers 1104.

[0080] The aforementioned systems have been described with respect to interaction between several components. It should be appreciated that such systems and components can include those components or sub-components specified therein, some of the specified components or sub-components, and/or additional components. Sub-components could also be implemented as components communicatively coupled to other components rather than included within parent components. Further yet, one or more components and/or sub-components may be combined into a single component providing aggregate functionality. The components may also interact with one or more other components not specifically described herein for the sake of brevity, but known by those of skill in the art.

[0081] What has been described above includes examples of the specification. It is, of course, not possible to describe every conceivable combination of components or methodologies for purposes of describing the subject specification, but one of ordinary skill in the art may recognize that many further combinations and permutations of the specification are possible. Accordingly, the specification is intended to embrace all such alterations, modifications and variations that fall within the spirit and scope of the appended claims. Furthermore, to the extent that the term "includes" is used in either the detailed description or the claims, such term is intended to be inclusive in a manner similar to the term "comprising" as "comprising" is interpreted when employed as a transitional word in a claim.

CLAIMS

What is claimed is:

1. An apparatus, comprising:

an analysis component that dynamically determines if an endpoint should be connected to a virtual talk group (VTG) based in part on an analysis of at least one of information associated with the endpoint or information determined based on the adherence of the endpoint with a predefined floor control mechanism; and

a dynamic proxy component that is employed to dynamically proxy the endpoint based on the determination.

2. The apparatus of claim 1, wherein the floor control mechanism specifies that the endpoint does not transmit into a given VTG that has more than a specified number of active media streams.

3. The apparatus of claim 1, further comprising a resource determination component that identifies a plurality of available system resources to optimize resource utilization.

4. The apparatus of claim 1, further comprising an identity collection component that receives an identity of the endpoint to assess a security risk associated with the endpoint.

5. The apparatus of claim 4 wherein the identity collection component employs credentials resident on the endpoint.

6. The apparatus of claim 5, wherein the security risk associated with the endpoint is that the endpoint transmits into a given VTG without adhering with the floor control policy of the system.

7. The apparatus of claim 1, further comprising an attribute collection component that receives attributes associated with the endpoint to at least one of determine a security risk associated with the endpoint or facilitate the analysis.

Motorola - Exhibit 1028 - Page 369

8. The apparatus of claim 1 wherein one or more disparate endpoints identify the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

9. The apparatus of claim 8, wherein a proxy is dynamically inserted between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism.

10. The apparatus of claim 8 wherein the parameters of the VTG are dynamically altered to conceal the VTG from the identified endpoint and prevent the endpoint from streaming into the VTG.

11. The apparatus of claim 1, wherein the dynamic proxy component dynamically establishes a communication path between the endpoint and one or more disparate endpoints based in part on the analysis.

12. The apparatus of claim 1, further comprising a capability collection component that identifies information regarding media capabilities of the endpoint, the information employed to determine if the endpoint should be directly connected to the VTG.

13. A method, comprising:

receiving information associated with an endpoint;

identifying information associated with the adherence of the endpoint with a predefined floor control mechanism; and

analyzing the identified information to determine if the endpoint should be connected to a virtual talk group (VTG) *via* a proxy.

14. The method of claim 13, further comprising identifying at least one of media capability information or identity information associated with the endpoint.

15. The method of claim 13, further comprising identifying the endpoint as non-conforming with the floor control mechanism based in part on monitoring the endpoint.

16. The method of claim 15, further comprising dynamically inserting a proxy between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism.

17. A system, comprising:

means for receiving information associated with an endpoint;

means for identifying information associated with the adherence of the endpoint with a predefined floor control mechanism; and

means for analyzing the identified information to evaluate if the endpoint should be connected to a virtual talk group (VTG) *via* a proxy.

18. The system of claim 17, further comprising means for dynamically inserting a proxy between the endpoint and the VTG if the endpoint is identified as non-conforming with the floor control mechanism.

19. The system of claim 17, further comprising means for dynamically establishing a communication path between the devices based in part on the analysis.

20. An apparatus, comprising:

an information determination component that identifies information related to an endpoint; and

a negotiation component that negotiates a communication session with an interoperability server (IS) based in part on at least one of the identified information or a predefined floor control mechanism associated with the IS.

21. The apparatus of claim 20, further comprising a capability determination component that identifies media capabilities associated with the endpoint, the media capabilities employed by the IS to dynamically determine if the endpoint should be connected to a virtual talk group (VTG) *via* a proxy.

22. The apparatus of claim 20, further comprising an identity determination component that determines an identity associated with the endpoint, the identity

Motorola - Exhibit 1028 - Page 371

employed by the IS to dynamically determine if the endpoint should be connected to a virtual talk group (VTG) *via* a proxy.

23. A method comprising:

initiating communication with a non-compatible communication device;

identifying information associated with an initiating device; and

negotiating a communication session with an interoperability server (IS) based in part on at least one of the identified information or a predefined floor control mechanism associated with the IS.

24. The method of claim 23, wherein the information associated with the initiating device includes at least one of media capability information associated with the initiating device or an identity of the initiating device.

25. The method of claim 23, further comprising evaluating if a proxy is employed to attach the initiating device to a virtual talk group (VTG).

26. The method of claim 25, further comprising transmitting media to the proxy over a private network through custom messages if it is evaluated that a proxy is employed.

27. The method of claim 25, further comprising, attaching the initiating device directly to the VTG and transmitting media directly to the VTG if a proxy is not employed to attach the initiating device to the VTG.

Motorola - Exhibit 1028 - Page 372

ABSTRACT

A system and methodology to facilitate communication between non-compatible communication devices by utilization of a dynamic media proxy is provided. Information associated with an endpoint, such as, media capabilities, identity and system resource information is collected. Media proxy'ing is performed as part of capability negotiation. A dynamic media proxy is employed based on an analysis of the collected information. An analysis component can identify an endpoint that does not adhere to specific rules of transmission and can dynamically connect such an endpoint to a VTG (virtual talk group) *via* a proxy to prevent the endpoint from transmitting media into an active VTG that already has multiple talkers streaming media. Additionally, the location where media processing can occur can be dynamically determined based on the available system resources.

Motorola - Exhibit 1028 - Page 373

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Filer:	James Joseph Pingor./Stacey Bussey
Attorney Docket Number:	CPOL955474/CSCOP130US

Filed as Large Entity

Utility Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Utility application filing	1011	1	310	310
Utility Search Fee	1111	1	510	510
Utility Examination Fee	1311	1	210	210
Pages:				
Claims:				
Claims in excess of 20	1202	7	50	350
Independent claims in excess of 3	1201	2	210	420
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**1800**

Electronic Acknowledgement Receipt

EFS ID:	3356803
Application Number:	12127397
International Application Number:	
Confirmation Number:	8388
Title of Invention:	INTEROPERABILITY AND COMMUNICATIONS SYSTEM DYNAMIC MEDIA PROXY BASED ON CAPABILITY NEGOTIATION
First Named Inventor/Applicant Name:	Shmuel Shaffer
Customer Number:	23623
Filer:	James Joseph Pingor./Stacey Bussey
Filer Authorized By:	James Joseph Pingor.
Attorney Docket Number:	CPOL955474/CSCOP130US
Receipt Date:	27-MAY-2008
Filing Date:	
Time Stamp:	16:18:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$1800
RAM confirmation Number	11476
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part / .zip	Pages (if appl.)

1	Drawings-only black and white line drawings	CPOL955474FiguresasFiled.pdf	217635 50e29b18557b431d49bb1ca9beae8696a4911493	no	11
Warnings:					
Information:					
2	Oath or Declaration filed	CPOL955474ExecDeclaration.pdf	695587 57b7e3eed664a721921ef431e6104c0804c67dfc	no	6
Warnings:					
Information:					
3	Application Data Sheet	ADS1.pdf	1130929 b549878ee6494f3151bfb8b72a2d1c44947e9b24	no	5
Warnings:					
Information:					
4		CPOL955474ApplicationasFiled.pdf	160892 b92aed96ea783e90b4a47ef744c82652d13b76d8	yes	28

Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	23
Claims	24	27
Abstract	28	28

Warnings:					
Information:					
5	Fee Worksheet (PTO-06)	fee-info.pdf	8615 37fbd7c2347043544d93c1654266b0e591f43eb6	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	2213658	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (12-04)
Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Filing Date: 05/27/08

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 12/127,397

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	310
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	510
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	210
TOTAL CLAIMS (37 CFR 1.16(i))	27	7	X$ 25		OR	X$50	350
INDEPENDENT CLAIMS (37 CFR 1.16(h))	5 minus 3 =	* 2	X$105			X$210	420
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $260 ($130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						0
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))			185			370	
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	0		TOTAL	1800

APPLICATION AS AMENDED – PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					N/A		OR	N/A	
						TOTAL ADD'T FEE		OR	TOTAL ADD'T FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					N/A		OR	N/A	
						TOTAL ADD'T FEE		OR	TOTAL ADD'T FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.