EXHIBIT 1

Stephen Gray

Expertise

- Distributed Computing Architecture
- Internet/Web/e-Commerce
- Web Services Protocols/SOA
- Client/Server Technology
- Electronic Presentation Technology
- Programming Languages

- Image and Document Processing
- Relational Database Design
- Network Architecture
- Software Quality
- Software and Systems Development, Integration and Management

Professional Summary

Mr. Gray has over 30 years of experience in the computer and communications industries. His background includes systems and software architecture, design and development as well as senior management positions in development, marketing, and general management.

Employment History

From:	1984	**Gray & Yorg, LLC**
To:	Present	San Diego, CA
	Position:	*Principal*

Mr. Gray is an expert in modern computing platform architecture, design, implementation and integration, including relational database design in networking environments. In providing consulting services, he has successfully completed the following projects:

- Performed patent portfolio analysis for large corporations
- Developed policies and procedures for a "clean" software development environment. Monitored activities to ensure conformance.
- CSO for a Business Process Management software start up. The firm develops Web Services/SOA based BPM creation, orchestration, management and optimization solutions.
- CTO for an e-Commerce Internet start up. The firm developed a product that specializes in procurement for public agencies.
- Interim CEO for a broadband Competitive Local Exchange Carrier (CLEC). Helped negotiate the successful sale of the CLEC.
- CTO for an Internet-based secure content distribution startup. The firm developed comprehensive Digital Rights Management (DRM) solutions for the control and promotion of content on the Internet.
- Architected several e-Commerce applications for legacy interoperability

- Participated in the architecture definition and design of a highly scalable, high performance device controller for multifunction document processing products
- Performed a detailed analysis of the competitive environment for retail point-of-sale hardware and software systems. Analysis included technology, marketing, compensation and back office interface issues
- Provided system design, product selection and project management for a turnkey software/hardware system for residential refuse hauling and toxic waste disposal company. System involved multiple hardware and software vendors around the IBM AS400 central processing system
- Led the design of a high performance, LAN-based image capture and statement printing subsystem using IBM system components using DBII relational database and SQL language for TRW
- Led the design of an image assisted, remittance processing system using IBM system components and Sybase relational database in a client/server architecture for TRW. Additionally, designed an object-oriented front end to the database so that the UNIX platform could execute Sybase applications
- Engaged to perform a technology audit for the United States Department of Agriculture using ORACLE database products, which resulted in a major overhaul of the database management implementation for their application
- Collaborated with FileNet to develop an IBM-to-UNIX interconnection strategy for their optical disk-based document imaging and filing system
- Defined high speed interconnection and relational database methods using SQL language for Marriott Corporation to handle large transaction volumes in a hotel reservations system
- Collaborated with Xerox in mid 1990s development of an electronic printing system front end supporting a wide range of advanced printing services, including resolution enhancement technology
- Advised Northern Telecom on the performance of IBM's Net View product
- Authored two technical seminars: SNA Technology Update, OS/2 and SAA, Introduction to Client/Server Technology with special emphasis on relational database management. Published articles in trade journals such as Interface Age, CASE World and Info World

From:	2001	**Networld Exchange Incorporated**
To:	2002	Bonsall, CA
	Position:	*Chief Technical Officer*

Networld Exchange, Inc. (NEI) provides Fortune 2000 companies private trading exchange (PTX) solutions that automate their B2B commerce activities. NEI is a restart. NEI is funded by institutional investors in New York and Florida. Mr. Gray was recruited in 4Q01 by the investors as part of the new management team.

From:	2000	**NTN Communications**
To:	2001	Carlsbad, CA
	Position:	*Chief Technical Officer*

NTN Communications, Inc. (AMEX: NTN) is the parent corporation of two operating divisions: Buzztime Entertainment, Inc. and the NTN Network®. Mr. Gray serves as CTO for the parent corporation and each of its operating divisions.

Buzztime Entertainment, Inc. develops and distributes sports and trivia games to a variety of interactive platforms including interactive television, the Internet, PDS and mobile phones.

The NTN Network, NTN's hospitality business, operates two interactive television (ITV) networks that broadcast games to millions of consumers each month at 3500 restaurants, sports bars and taverns in North America.

Mr. Gray is responsible for all of the technical aspects of the corporations as well as forward looking programs and business opportunities.

From:	1987	**Simpact Associates**
To:	1988	
	Position:	*Director, Product Marketing*

Directed the full life cycle of definition, delivery, marketing and enhancement of four sets of IBM connectivity products, including:

- SNA protocol support hardware and software for DEC VAX systems
- An IBM PC-based gateway product that supports SNA and other industry-standard communications architectures
- A Netware-based Token Ring Network adapter board and software for DEC VAX systems
- A hardware/software product that receives financial market feeds and reformats the information for presentation to programs running a VAX via a proprietary applications programming interface (API)

From:	1982	**Xerox Corporation**
To:	1987	
	Position:	*General Manager, Host Software Products*
	1985-87	As the founder and leader of the product delivery organization of a Xerox independent business unit, Mr. Gray managed 21 employees and 33 contract professionals. He directed the definition, architecture,

design, development, test, product transfer and sustaining engineering of six products for electronic page printers connected to IBM mainframes, DEC VAX and IBM PC's.

1982-85 Manager, Foreign System Interconnect. Managed four professionals who defined and developed the technical interconnect strategy for electric page printers to wide-and local-area networks. Mr. Gray's group delivered host software, network and printer engineering services. He invented a new printer interconnection technique, developed interfaces to Ethernet local area network, and designed connections to IBM mainframes using SNA and the System/370 channel.

From: 1979 **Computer Communications, Inc.**
To: 1982
Position: *Manager, Communication Controller Software Development*
As leader of the architecture, design, development, and testing of an SNA communications controller, Mr. Gray managed 24 professionals. His group successfully designed, developed and deployed the controller's operating software, diagnostics, host-based compilers, and system support software. Before that, he was the product manager for front-end processors and remote concentrators. Also, he engineered an X.25 multi-channel controller.

From: 1977 **Olivetti Corporation**
To: 1979
Position: *Regional Support Manager*
Started as a district manager and later became a regional software support manager for a series of mini- and microcomputer business systems. Applications included general business and on-line front-office banking.

From: 1973 **Burroughs Corporation**
To: 1977
Position: *Systems Programmer, Systems Analyst*
Specializing in data communications software and held several design and product implementation positions in the mid range and small system development groups.

Additional Professional Experience:

- Designed and implemented numerous relational database management systems using Sybase, Informix, Microsoft Access, DB2.
- Knowledgeable in C, C++, SQL, COBOL, RPG, Basic, Java, various Assembler languages, HTML, XML.

- Designed IBM SNA Distribution Services compatible electronic mail interface product. The product interfaced to MCI mail services.
- Designed peer-to-peer printing network product for MCI
- Designed image-processing system for TRW on contract with the Internal Revenue Service. Participated in the implementation of a prototype of the system.
- Designed image based item processing system for TRW and IBM Participated in the implementation of a prototype of the system.
- Defined IBM interoperability strategy for FileNet products.
- Defined distributed network printing product for Xerox.
- Defined and managed several networking products for Simpact Associates. Used the System Strategies Inc. Express SNA package.
- Defined, designed and implemented several interoperability interfaces to Xerox Electronic Printers.
- Defined, designed and implemented telecommunications control devices for Computer Communication Incorporated.
- Developed and presented numerous public and in-house courses in IBM, Unix, Internet and related networking technologies.
- Member of UCSD Connect "Most Innovative Product Award" Selection Committee (2002, 2003, 2004).
- Member of Association of Computing Machinery

Litigation Support Experience

Date: 2012   **Morrison & Foerster**
Augme v. Yahoo
Patent infringement – distributed processing
Active

Date: 2011   **Quinn Emanuel**
Catalina Marketing v. Coupons Inc.
Contract Dispute
Active

Date: 2011   **Alston & Bird**
Openwave v. Apple, et al
Patent infringement – distributed processing
Active

Date: 2011   **DLA Piper**
Motorola v. Tivo
Patent infringement – audio/video processing
Inactive

Date: 2010   **Law Office of Christian E. Mammen, Lieff Cabraser Heimann and Bernstein, LLP and Tousley Brain Stephens, LLP**

Deep9 v. Barnes & Noble
Patent infringement – distributed processing
Active

Date: 2010   **McDermott Will & Emery, Alston & Bird**
Bedrock v. Soft Layer, et al
Patent infringement – distributed processing
Inactive

Date: 2010   **Quinn Emanuel**
Soverain v. J.C. Penney, et al
Patent infringement – distributed processing
Active

Date: 2009   **Jones Day**
Oracle v. SAP
Copyright infringement – enterprise software
Inactive

Date: 2009   **Foley & Lardner**
DataTreasury v. US Bank
Patent infringement – distributed processing
Inactive

Date: 2009   **Gibson, Dunn & Crutcher**
IPI v. Red Hat, Novell
Patent infringement – distributed file systems
Inactive

Date: 2009   **Jackson and Walker**
ICR v. Harpo
Patent infringement – e-Commerce
Inactive

Date: 2009   **Cooley Godward**
Leader v. Facebook
Patent infringement – distributed file systems
Inactive

Date: 2009   **Jones Day**
SuperSpeed v. IBM
Patent infringement – distributed file systems
Inactive

Date: 2008   **Baker & Botts**
Fotomedia v. Yahoo!

Patent infringement – file sharing
Inactive

Date: 2008   **Hogan & Hartson**
ODS v. Magna Entertainment
Patent infringement – E-Commerce
Inactive

Date: 2008   **Winston & Strawn**
CNET v. Etilize
Patent infringement – E-Commerce
Inactive

Date: 2008   **Weil, Gotshal & Manges**
i4i v. Microsoft
Patent infringement – Data formatting, representation
Inactive

Date: 2008   **Jones Day**
MathWorks v. COMSOL
Patent infringement - interoperability, Copyright
Inactive

Date: 2008   **Townsend, Townsend & Crew**
Anthurium v. Spheris
Patent infringement – Distributed Processing
Inactive

Date: 2008   **Jones Day**
Soverain v. CDW, et al
Patent infringement – e-commerce
Inactive

Date: 2008   **Paul Hastings**
Sify v. Yahoo
Trade secrets
Inactive

Date: 2007   **Finnegan Henderson**
Cisco v. Telcordia
Patent infringement – system monitoring
Inactive

Date: 2007   **Brown Raysman**
WebSide Story v. NetRatings
Patent infringement – web monitoring

Inactive

Date: 2007   **Paul Hastings**
MediaTek v. Sanyo
Patent infringement – data compression
Inactive

Date: 2007   **Sutherland**
FedEx v. U.S.
Tax Credit
Active

Date: 2006   **Jones Day**
IBM v. Amazon
Patent infringement – Electronic commerce
Inactive

Date: 2006   **Brown Raysman**
NetRatings v. SageMetrics
Patent infringement – web monitoring
Inactive

Date: 2006   **Young Conaway Stargatt & Taylor**
Sungard v. PHI
Breach of contract
Inactive

Date: 2006   **Paul Hastings**
Autobytel v. Dealix
Patent Infringement – Electronic commerce
Inactive

Date: 2005   **Brown Raysman**
NetRatings v. Coremetrics, et al
Patent Infringement – Electronic commerce
Inactive

Date: 2005   **Kim & Wilcox**
HealthFirst v. HealthTrio
Contract Dispute – Electronic information portals
Inactive

Date: 2005   **Ropes & Gray (Fish & Neave)**
Ampex v. Kodak, et al
Patent Infringement – Image transformation
Inactive

Date: 2005   **Sedgwick Detert Moran & Arnold LLP**
                   Waltrip Associates v. Kevin Kimperlin & Spencer Trask Ventures
                   Contract Dispute - Theft of trade secret, EDI and ecommerce
                   Inactive

Date: 2005   **Orrick, Herrington & Sutcliffe LLP**
                   Metilinx v. Hewlett-Packard
                   Contract Dispute - Large scale software deployment, QA, system
                   management
                   Inactive

Date: 2005   **Morrison & Foerster**
                   BEA v. SoftwareAG
                   Patent Infringement - Web Services, Software development tools,
                   OOP
                   Inactive

Date: 2005   **Jones Day**
                   Orion v. American Honda
                   Patent Infringement – Electronic Catalogs and Brochures
                   Inactive

Date: 2004   **Keker & Van Nest**
                   AB Cellular v. City of Los Angeles
                   Contract Dispute – Tax Authority, Source Code Analysis
                   Inactive

Date: 2004   **Silicon Edge Law Group**
                   Oracle v. Mangosoft
                   Patent Infringement – Web System Personalization
                   Inactive

Date: 2003   **Smith Katzenstein & Furlow LLP**
                   S. Rakoff et al v. Dot Com Group, A. Nash et al
                   Contract Dispute – Web Analytics
                   Inactive

Date: 2003   **Jones Day**
                   Hill v. IBM
                   Patent Infringement – Electronic Catalog, data management
                   Inactive

Date: 2003   **Fish & Richardson**
                   Mirror Imaging LLC v. Affiliated Computer Services

Patent Infringement – Electronic Document Storage
Inactive

Date: 2003   **Jones Day**
VPS LLC v. Eastman Kodak Co. and Ofoto
Patent Infringement – Digital Media distribution
Inactive

Date: 2002   **Steptoe and Johnson**
Steven Heard & Dean Messier v. California Institute of Technology
& Jet Propulsion Laboratory
Patent Infringement - Digital Images Upload/Storage
Inactive

Date: 2002   **Fish & Neave LLP**
Harrah's Casino v. Station's Casino
Patent Infringement – Player loyalty system in a network
Inactive

Date: 2002   **Preston Gates and Ellis LLP**
Case   Eyefinity, Inc. vs. Entigo, Inc.
Project: Contract Dispute - Faulty software development
Status: Inactive

Date: 1998   **Robman & Seeley**
Case   Ametron-American Electronic Supply v. Entin, et al
Project: Theft of Trade Secrets - Recovery of Data and Evaluation
Status: Inactive

Date: 1998   **Kronish Lieb Weiner & Hellman**
Case   GTE v. Videotron
Project: Contract Dispute - Analysis of UNIX-based system
Status: Inactive

Date: 1998   **Kudo & Daniels**
Case   Total Recovery Services v. Microage
Project: Contract Dispute - Faulty Product, evaluation of product.
Status: Inactive

Date: 1996   **Baker & Botts**
Case   BMC Software v. Peregrine Systems, Inc.
Project: Theft of Trade Secrets - DB2 enhancement software.

Status: Inactive

Date: 1995 **Pacific Bell Inside Counsel**
Case David McGoveran v. Pacific Telesis Group and Pacific Bell
Damages trial in Theft of Trade Secret Litigation - assess market
potential and value of SQL software.
Status: Inactive

Date: 1994 **Cooley Godward Castro Huddleson & Tatum**
Case ADV Freeman v. Boole & Babbage
Project: Contract Dispute - Assessment of software quality, expert witness
on product marketing and software quality.
Status: Inactive

Date: 1984 **O'Melveny & Myers**
Case IBM v. NCR Comten
Project: Copyright Infringement - Code comparison and product analysis
and design of alternative technologies.
Status: Inactive

Education

Year	College/University	Degree
1973	California Polytechnic University	BS, Economics