

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<i>In re</i> patent of Hoese	§	Petition for <i>Inter Partes</i> Review
	§	
U.S. Patent No. 7,051,147	§	Attorney Docket No.: 31046.7
	§	Customer No.: 27683
Issued: May 23, 2006	§	
	§	Real Parties in Interest:
Title: STORAGE ROUTER AND	§	Cisco Systems, Inc.
METHOD FOR PROVIDING	§	Quantum Corporation
VIRTUAL LOCAL STORAGE	§	

**Declaration of Andrew Hospodor, Ph.D.**  
**Under 37 C.F.R. § 1.68**

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## **I. Introduction**

I, Andrew Hospodor, Ph.D., declare:

1. I am making this declaration at the request of Cisco Systems, Inc. and Quantum Corporation in the matter of the *Inter Partes* Review of U.S. Patent No. 7,051,147 (“the ’147 Patent”) to Hoese.

2. I am being compensated for my work in this matter. My compensation in no way depends upon the outcome of this proceeding.

3. In the preparation of this declaration, I have studied:

(1) The ’147 Patent, CQ-1001;

(2) The prosecution history of the ’147 Patent, CQ-1002;

(3) CMD Technology, Inc., *CRD-5500 SCSI Raid Controller User's Manual*, Revision 1.3, November 21, 1996 (“CRD-5500 Manual”), CQ-1004;

(4) *CMD Technology CRD-5500 RAID*,  
<http://web.archive.org/web/19961226091552/http://www.cmd.com/brochure/crd5500.htm>, archived December 26, 1996 by archive.org  
 (“CRD-5500 Data Sheet”), CQ-1005;

(5) Hewlett-Packard Journal, Volume 47, Number 5, October 1996 (“HP Journal”), CQ-1006;

- (6) Sun Microsystems Computer Company, *SPARCstorage Array Configuration Guide*, Revision A, March 1995 (“SPARCstorage Guide”), CQ-1007;
- (7) *SPARCstorage Array – Product Brief*,  
<http://web.archive.org/web/19961220045017/http://www.sun.com/products-n-solutions/hw/peripherals/array.html>, archived December 20, 1996 by archive.org (“SPARCstorage Product Brief”), CQ-1008;
- (8) ORDER of November 8, 2011, *Crossroads Systems, Inc. v. 3PAR, Inc., et al.*, case no. 1-10-cv-00652 (W.D. Tex. 2010), CQ-1009;
- (9) American National Standard of Accredited Standards Committee X3, *Small Computer System Interface – 2 (X3T9.2)*, Rev. 10L, September 7, 1993, CQ-1010; and
- (10) American National Standard for Information Systems, *Fibre Channel Physical and Signaling Interface (FC-PH) X3.230*, Rev. 4.3, June 1, 1994, CQ-1011.

**4.** In forming the opinions expressed below, I have considered:

- (1) The documents listed above,
- (2) The relevant legal standards, including the standard for obviousness provided in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007), and

(3) My knowledge and experience based upon my work in this area, as described below.

## II. Qualifications and Professional Experience

5. My complete qualifications and professional experience are described in my curriculum vitae, a copy of which is attached as an exhibit to this declaration. Following is a brief summary of my relevant qualifications and professional experience:

6. I received a Bachelor of Science degree in Computer Engineering from Lehigh University in 1981, a Master of Science degree in Computer Science from Santa Clara University in 1986, and a Ph.D. in Computer Engineering from Santa Clara University in 1994. My Ph.D. emphasis was in storage architecture and systems. My dissertation was entitled: “A Study of Prefetch in Caching SCSI Disk Drive Buffers.”

7. I have been part of the data storage industry for over 25 years and involved in firmware engineering for disk drive and tape drive controllers, including implementation of command processing, error correction, and buffer management. I have also focused on simulation and implementation of disk and tape drives at Quantum. I have been involved in the architecting of network storage devices that included disk drives, tape drives, network switches, routers and

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