# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC. Petitioner,

v.

REALTIME ADAPTIVE STREAMING, LLC Patent Owner.

Case: IPR2018-01384 U.S. Patent No. 8,934,535

PETITION FOR *INTER PARTES* REVIEW OF CLAIMS 1-6, 8-12, 14-17, 19, 21, 22, AND 24 OF U.S. PATENT NO. 8,934,535

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
United States Patent and Trademark Office
PO Box 1450
Alexandria, Virginia 22313–1450
Submitted Electronically via PTAB E2E



## **TABLE OF CONTENTS**

I.	MANDATORY NOTICES1						
	A.	Real	Party-In-Interest	1			
	B.	Related Matters1					
	C.	Lead and Back-Up Counsel5					
	D.	Servi	ce Information	5			
II.	PETI	TION	ER'S STANDING	5			
III.	RELI	ELIEF REQUESTED6					
IV.	SUM	UMMARY OF REASONS FOR RELIEF REQUESTED6					
V.	SUM	UMMARY OF THE '535 PATENT8					
VI.	PROS	SECU	ΓΙΟΝ HISTORY	9			
VII.	IDENTIFICATION OF THE CHALLENGE, STATUTORY BASIS FOR THE CHALLENGE, AND CLAIM CONSTRUCTION10						
	A.	Chall	enged Claims	10			
	B.	Clain	n Construction	10			
		1.	"data block"/"data blocks" (all challenged claims)	10			
		2.	"access profile" (claims 1 and 14)	11			
		3.	"asymmetric data compression" (claims 1, 10, and 12); "asymmetric compressors" (claims 15, 16, 24)	12			
	C.	Sumr	nary of Grounds For Trial	13			
	D.	All Grounds Are Based On Prior Art Patents14					
	E.	Grounds For Trial Are Not Cumulative Of Other Challenges and This is Petitioner's First Challenge					
VIII.	ORDINARY SKILL AND KNOWLEDGE OF A POSITA10						
	A.	A. POSITA1					
	B.	Tech	nical Background	16			
IX.	SUMMARY OF THE PRIOR ART						
X.	THE CHALLENGED CLAIMS ARE UNPATENTABLE						
	A. Ground 1: Claims 1-2, 9-10, and 14 Are Anticipated By Dvir o Alternatively Rendered Obvious By Dvir and Koz						
		1.	Claim 1	19			



	2.	Claim 2	26				
	3.	Claim 9	27				
	4.	Claim 10	28				
	5.	Claim 14	28				
B.	Alte	Ground 2: Claims 3, 4, and 11 Are Anticipated by Dvir, or, In the Alternative Obvious Over the Combined Teachings of Dvir (With or Without Koz) and Ando					
	1.	Motivation to Combine	32				
	2.	Claim 3	34				
	1.	Claim 4	35				
	2.	Claim 11	35				
C.		Ground 3: Claims 5-6, 12, 15-17, 19, and 22 Are Obvious Over the Combined Teachings of Dvir (With or Without Koz) and Hamadani 36					
	1.	Motivation to Combine	36				
	2.	Claims 5 and 6	38				
	3.	Claim 12	40				
	4.	Claim 15	41				
	5.	Claim 16	45				
	6.	Claim 17	45				
	7.	Claim 19	47				
	8.	Claim 22	48				
D.		Ground 4: Claim 21 Is Obvious Over the Combined Teachings of Dvir (With or Without Koz), Hamadani, and Figueredo49					
	1.	Motivation to Combine	49				
	2.	Claim 21	52				
E.		Ground 5: Claims 1, 8, 15, and 24 Are Obvious Over Ishii And Koz					
	1.	Motivation to Combine	54				
	2.	Claim 1	58				
	3.	Claim 8	61				
	4.	Claim 15	62				
	5.	Claim 24 Would Have Been Obvious Over Ishii and Koz	64				



XI.	FEES	.65
XII.	CONCLUSION	.65



## **PETITIONER'S EXHIBIT LIST**

Ex. No.	BRIEF DESCRIPTION
1001	U.S. Patent No. 8,934,535 to Fallon et al.
1002	Declaration of Joseph P. Havlicek, Ph.D.
1003	Curriculum Vitae of Joseph P. Havlicek, Ph.D
1004	United States Provisional Application No. 60/268,394 (filed Feb. 13, 2001)
1005	File History for U.S. Patent No. 8,934,535
1006	U.S. Patent No. 6,309,424 to Fallon
1007	U.S. Patent No. 6,557,001 to Dvir et al. ("Dvir")
1008	Iskender Agi & Li Gong, An Empirical Study of Secure MPEG Video Transmissions, Proc. of the 1996 Symposium on Network and Distributed Systems Security, IEEE (1996).
1009	Ke Shen, A Study of Real-Time and Rate Scalable Image and Video Compression, Purdue Univ. Thesis (Dec. 1997).
1010	Ke Shen & E. Delp, Parallel Approaches to Real-Time MPEG Video Compression, ICPP, Vol. 2 (1996).
1011	Rahul Garg, Methods for Matching Compressed Video to ATM Networks (1998).
1012	Krasmit Kolarov, et al., Low Complexity Real-time Video Encoding for Soft Set-Top Box Platforms, Technical Program of the Cable 2K Conf. (May 2000)
1013	U.S. Patent No. 5,845,083 to Hamadani et al. ("Hamadani")
1014	U.S. Patent No. 6,195,024 to Fallon
1015	Memorandum Opinion and Order, <i>Realtime Data, LLC v. Actian Corp.</i> , No. 6:15-cv-463 (E.D. Tex.) (dated Jul. 28, 2016)



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

# **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

#### **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

#### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

