

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DELL INC., EMC CORPORATION, HEWLETT-PACKARD
ENTERPRISE CO., AND HP ENTERPRISE SERVICES, LLC
Petitioner,

v.

REALTIME DATA LLC d/b/a IXO
Patent Owner.

Case: IPR2017-00176

**DECLARATION OF CHARLES D. CREUSERE, Ph.D., IN SUPPORT
OF THE PETITION FOR *INTER PARTES* REVIEW OF CLAIMS 104
AND 105 OF UNITED STATES PATENT NO. 7,161,506**

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 the Patent Review Processing System

TABLE OF CONTENTS

I.	BACKGROUND AND QUALIFICATIONS	1
A.	Educational Background.....	1
B.	Professional Experience.....	1
C.	Patents and Publications	4
D.	Other Relevant Qualifications.....	5
II.	LEVEL OF ORDINARY SKILL	7
III.	MATERIALS RELIED UPON	9
IV.	SUMMARY OF THE '506 PATENT AND ITS TECHNICAL FIELD	9
A.	'506 Patent Introduction	9
B.	Technical Background and Overview of the '506 Patent.....	10
V.	CLAIM CONSTRUCTION.....	15
VI.	ANALYSIS OF THE '506 PATENT CLAIMS	16
A.	The Challenged Claims.....	16
B.	Legal Standards.....	16
VII.	INVALIDITY BASED ON PRIOR ART UNDER 35 U.S.C. § 103.....	21
A.	Claims 104 and 105 Would Have Been Obvious Over Franaszek in View of Hsu, or in the Alternative, Obvious Over Franaszek in View of Hsu and Sebastian.	22
1.	Assumptions.....	22
2.	Overview of Franaszek	22
3.	Overview of Hsu	25
4.	Overview of Sebastian	36
5.	Independent Claim 104 Would Have Been Obvious Over Franaszek in View of Hsu, or in the Alternative, Obvious Over Franaszek in View of Hsu and Sebastian.....	38
a.	Preamble: “A computer implemented method for compressing data” ..	38
b.	Limitation 104[A]: “analyzing data within a data block of an input data stream to identify one or more data types of the data block, the input data stream comprising a plurality of disparate data types”.....	44

c.	Limitation 104[B]: “performing content dependent data compression with a content dependent data compression encoder if a data type of the data block is identified”	50
i.	Content Dependent Data Compression Encoder	50
ii.	Performing Content Dependent Data Compression with a Content Dependent Data Compression Encoder if a Data Type of the Data Block is Identified	54
d.	Limitation 104[C]: “performing data compression with a single data compression encoder, if a data type of the data block is not identified”	57
i.	Single Data Compression Encoder	57
ii.	Performing Data Compression with a Single Data Compression Encoder if a Data Type of the Data Block is not Identified	67
e.	Limitation 104[D]: “wherein the analyzing of the data within the data block to identify one or more data types excludes analyzing based only on a descriptor that is indicative of the data type of the data within the data block”	70
6.	Conclusion: Claim 104 Would Have Been Obvious	79
7.	Independent Claim 105 Would Have Been Obvious Over Franaszek in View of Hsu, or in the Alternative, Obvious Over Franaszek in View of Hsu and Sebastian.....	80
a.	Preamble: “A computer implemented method”	80
b.	Limitation 105[A]: “receiving a data block in an uncompressed form, said data block being included in a data stream”	80
c.	Limitation 105[B]: “analyzing data within the data block to determine a type of said data block”	82
d.	Limitation 105[C]: “compressing said data block to provide a compressed data block”	82
e.	Limitation 105[D]: “wherein if one or more encoders are associated to said type, compressing said data block with at least one of said one or more encoders, otherwise compressing said data block with a default data compression encoder, and”	83
f.	Limitation 105[E]: “wherein the analyzing of the data within the data block to identify one or more data types excludes analyzing based only on a descriptor that is indicative of the data type of the data within the data block.”	93

8. Conclusion: Claim 105 Would Have Been Obvious.....93
VIII. Secondary Considerations.....93
IX. Conclusion94
I declare under penalty of perjury that the foregoing is true and correct.95

EXHIBITS CONSIDERED

Exhibit	Description
1001	U.S. Patent No. 7,161,506 (the “’506 patent”) (including portions of the prosecution history and reexamination histories of the ’506 patent)
1004	U.S. Patent No. 5,870,036 to Franaszek et al. (“Franaszek”)
1005	W.H. Hsu, <i>et al.</i> , <i>Automatic Synthesis of Compression Techniques for Heterogeneous Files</i> , Software Practice & Experience, Vol. 25, No. 10 pp. 1097-1116 (Oct. 1995) (“Hsu”)
1009	McGraw-Hill Dictionary of Scientific and Technical Terms, Fifth Ed. (1993) (excerpts)
1010	Microsoft Press Computer Dictionary, Third Ed. (1997) (excerpts)
1017	U.S. Patent No. 9,054,728 (“the ’728 patent”)
1027	William Underwood, <i>Extensions of the UNIX File Command and Magic File for File Type Identification</i> , Technical Report ITTL/CSITD 09-02, Georgia Tech Research Institute (Sept. 2009).
1028	<i>AT&T UNIX® PC UNIX System V User’s Manual, Volume 1</i> (1986)
1029	File(1): <i>FreeBSD General Commands Manual</i> (Dec. 8, 2000)
1030	U.S. Patent No. 6,253,264 to Sebastian (“Sebastian”)

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.