IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD

PATENT TRIAL AND APPEAL BOARD

FISERV, INC., JACK HENRY & ASSOCIATES, INC., Q2 SOFTWARE, INC., AMERICAN NATIONAL BANK OF TEXAS and HANMI BANK PETITIONER

v.

MIRROR IMAGING LLC PATENT OWNER

Case CBM2018-00017 Patent 7,552,118

DECLARATION OF WILLIAM R. MICHALSON

TABLE OF CONTENTS

I.	Introd	duction4	
II.	Background Qualifications		
III.	Materials Reviewed		
IV.	Legal Standards		
V.	Level of Ordinary Skill in the Pertinent Art		
VI.	Claim Construction		
VII.	Overview of the Mirror Imaging Patents16		
VIII.	The Claims Of The '118 Patent Are Directed To A "Financial		
	Activity."		
IX.	The Claims Of The '118 Patent Are Not Directed To A		
	"Technological Innovation"		
X.	The C	Challenged Claims Do Not Include an "Inventive Concept"	
	A.	The Limitations Of The Independent Claims Do Not Constitute	
		An "Inventive Concept"	
	B.	The Dependent Claims Do Not Transform the Claims into An	
		"Inventive Concept"	
XI.	CONCLUSION		

LIST OF EXHIBITS

EXHIBIT NO.	DESCRIPTION
Ex. 1001	U.S. Patent No. 7,552,118, entitled "Method Of Obtaining An
	Electronically-Stored Financial Document"
Ex. 1002	File History of U.S. Patent Application No. 14/857,854
Ex. 1003	File History of U.S. Patent Application No. 09/548,490
Ex. 1004	File History of U.S. Patent Application No. 13/272,936
Ex. 1005	File History of U.S. Patent Application No. 12/902,973
Ex. 1006	File History of U.S. Patent Application No. 10/104,541
Ex. 1007	File History of U.S. Patent Application No. 11/202,790
Ex. 1008	File History of U.S. Patent Application No. 12/489,087
Ex. 1009	File History of U.S. Patent Application No. 13/840,892
Ex. 1011	Joint Claim Construction Chart, Mirror Imaging LLC v. Suntrust
	Banks, Inc., Case No. 2:08-cv-00295-DF, Dkt. No. 191-2, (E.D.
	Tex. Feb. 16, 2010)
Ex. 1015	Robert Hudson, Finding Your Ancestors at the Troy Public
	Library, Troy Public Library
	http://www.thetroylibrary.org/pdf/FindAncestors.pdf (February
	1993)
Ex. 1021	William R. Michalson CV.
Ex. 1023	Online Computer Library Center ("OCLC"), Together We Make
	Breakthroughs Possible, available at
	http://www.oclc.org/en/about.html
Ex. 1024	Society of American Archivists, microfiche, available at
	https://www2.archivists.org/glossary/terms/m/microfiche
Ex. 1025	Online Computer Library Center ("OCLC"), Dewey Decimal
	Classification summaries, available at
7 1021	https://www.oclc.org/en/dewey/features/summaries.html
Ex. 1026	Online Computer Library Center ("OCLC"), Furthering Access
F 1007	to The World's Information for 30 Years, (1997).
Ex. 1027	U.S. Patent No. 6,349,373 to Sitka, <i>et al.</i> ("Sitka).
Ex. 1028	U.S. Patent No. 6,192,165 to Irons.
Ex. 1029	U.S. Patent No. 5,784,610 to Copeland, et al. ("Copeland")
Ex. 1030	Muller, Computerized Document Imaging Systems, Artech
E 1001	House, Inc. (1993).
Ex. 1031	D'Alleyrand, Networks and Imaging Systems in a Windowed
F 1022	Environment, Artech House, Inc. (1996).
Ex. 1032	Robek, Information and Records Management,

	Glencoe/McGraw-Hill, Inc. (4 th ed. 1995).	
Ex. 1033	Green, Introduction to Electronic Document Management	
	Systems, Academic Press, Inc. (1993).	
Ex. 1034	Systems Analysis of Medical Records in Georgia, Georgia	
	Institute of Technology and Westinghouse Electric Corporation,	
	Volume 1, September 1971.	

I. Introduction

- I, William R. Michalson, declare as follows:
- I have been retained by Fiserv, Inc., Jack Henry & Associates, Inc., Q2 Software, Inc., American National Bank of Texas, and Hanmi Bank (collectively, "Petitioner") as an expert consultant in this Covered Business Method ("CBM") proceeding of U.S. Patent No. 7,552,118 ("the '118 Patent," attached as Ex. 1001). I have also been asked to provide expert opinions in CBM proceedings in connection with U.S. Patent Nos. 6,963,866 ("the '866 Patent"); 7,836,067 ("the '067 Patent"); and 9,141,612 ("the '612 Patent").
- 2. I am over 21 years of age and, if I am called upon to do so, I would be competent to testify as to the matters set forth herein.
- 3. I am being compensated for my time in connection with this CBM. My compensation is not affected by the outcome of this matter.
- 4. I have been asked to provide my opinions regarding whether claims 1-40 of the '118 Patent ("the Challenged Claims") are invalid as encompassing abstract ideas contrary to 35 U.S.C. § 101.
- 5. The application for the '118 Patent was filed on August 12, 2005 as U.S. Application No. 11/202,790 ("the '790 Application") and issued on June 23, 2009.

- 6. The '118 Patent is related to the '866 Patent (filed March 22, 2002); the '067 Patent (filed June 22, 2009); and the '612 Patent (filed March 15, 2013). Each of the '118 Patent, the '612 Patent, the '067 Patent, and the '866 Patent claims the benefit of Provisional Application No. 60/129,021 ("the Provisional Application"), filed April 13, 1999. I collectively refer to all four of these patents as the "Mirror Imaging patents." In this declaration, I may refer to the Mirror Imaging patents collectively. As explained below, because the patents have substantially similar specifications and because I understand that they have the same priority date of April 13, 1999, the statements I make apply to each of the Mirror Imaging patents, including the patent considered in this declaration.
- 7. The face of the Mirror Imaging patents name Michael D. Schulze and Richard J. Gagnon as the named inventors for the Mirror Imaging patents, and identifies Mirror Imaging, LLC as the named assignee. Ex. 1001.
- 8. In preparing this Declaration, I have reviewed the '866 patent, the '118 patent, the '067 patent, and the '612 patent, the file histories for each of the listed patents and technical references from the time of the alleged invention.
- 9. I have been asked by Petitioner to assist in evaluating the claims and the disclosure of the '118 patent. My opinions are set forth below.

II. Background Qualifications

- 10. I am an independent consultant, and all of my opinions herein are based on my own personal knowledge and experience. In forming my opinions, I have relied on my knowledge and experience in software and hardware engineering, electrical engineering, and computer science, and on the documents and information referenced in this declaration.
- 11. I have attached to this declaration a current copy of my *curriculum vitae* ("C.V.") (Ex. 1021), which details my education and experience in the field of electrical engineering and computer science. Additionally, my C.V. details a listing of all the cases for which I have consulted as an expert witness. The following provides a brief overview of my experience which is relevant to the matters set forth in the cited patents and this declaration.
- 12. I received a Bachelor of Science in electrical engineering from Syracuse University in 1981. I then received a Masters of Science in electrical engineering from Worcester Polytechnic Institute in 1985, special courses for this degree included computer architecture, communications systems, and solid-state physics. In 1989, I received a Doctorate in electrical engineering from Worcester Polytechnic Institute, my dissertation focused on a hierarchical, multiple processor, computer architecture for executing artificial intelligence programs.

- 13. From 1981 to 1985, I worked as an engineer in the Displays Department of the Computer and Displays Laboratory at Raytheon Company ("Raytheon"). During my time in this group I designed and debugged circuit assemblies for air traffic control. Additionally, I worked as a lead engineer in the design of several semi-custom VLSI circuits for both signal and data processing applications. As such, I have acquired expertise and I am an expert in the areas of circuitry and data processing.
- 14. In 1985 I was awarded a Fellowship to pursue my PhD and took a leave of absence until 1988. From 1988 to 1991 I returned to Raytheon and worked in the Equipment Division.
- 15. After my return to Raytheon, I became involved in several projects including fault-tolerant multiprocessoring, optimal task allocation, performance modeling and scaling, high clutter signal detection, and power efficient computing. During this time I worked largely as a consultant to other departments within the laboratory, I gained expertise in areas including hardware and software development for supercomputers.
- 16. Starting in 1991, I have held various teaching positions at the Worcester Polytechnic Institute, including Assistant Professor, Associate Professor, and Full Professor. I currently hold academic appointments in the Departments of electrical and computer engineering, mechanical engineering, computer

science and in the robotics engineering program. I have taught classes in electrical, computer, and robotics engineering, as well as computer science. In particular, I have taught courses including computer architecture, real-time system design, foundations of embedded systems, introduction to microprocessor systems, and microprocessor system design. Such courses have provided me with research and expertise in computer programing, operating systems, verification/validation, memory system design, and microprocessor system design.

- 17. In 1995 I created Research Associates, LLC ("Research Associates"), a company through which I have provided expertise as an engineer and consultant in litigation matters in the areas of computer systems, communications, and navigation.
- 18. My litigation-related work through Research Associates is detailed in my C.V. See Ex. 1021.
- 19. From 2012-2014, I worked for Grid Roots, LLC ("Grid Roots") assisting in hardware and software engineering and development of intellectual property relating to tracking. During my time with Grid Roots, I gained additional expertise in hardware and software engineering, specifically in the areas of navigation and tracking using Global Positioning Systems.

20. In addition to my practical experience, I have authored or co-authored numerous papers and am listed as an inventor on several patents in the electrical engineering field. A selection of these papers and patents are presented below. A more complete listing can be found in my C.V. *See* Ex. 1021.

Papers

- Concurrency: Practice and Experience, "Determining Update Latency Bounds in Galactica Net," published in October 1994.
- Proc. 2013 International Technical Meeting of the Institute of Navigation (ION ITM 2013), "Analysis of L1C Acquisition by Combining Pilot and Data Components over Multiple Code Periods," January 2013.
- Proc. 25th International Technical Meeting of the Satellite Division of the Institute of Navigation (ION GNSS 2012), "Analysis of Coherent Combining for L1C Acquisition," September 2012.
- ICWN-04, 2004 International Conference on Wireless Networks, "A
 3D Location Discovery Algorithm for Ad Hoc Networks," June 2004.
- Proc. SPIE Cooperative Intelligent Robotics in Space III, "The Application of Neural Networks to Nonlinear Filtering," 1992.

 Proc. IEEE 1st International Conference on Neural Networks, "Real-Time Evidential Reasoning and network Based Processing," June 1987.

Patents

- U.S. Patent No. 8,928,459, "Precision Location Methods and Systems."
- U.S. Patent No. 8,284,711, "Apparatus and Methods for Addressable
 Communication using Voice-Grade Radios."
- U.S. Patent No. 7,896,807, "Multi-channel Electrophysiologic Signal
 Data Acquisition System on an Integrated Circuit."
- U.S. Patent No. 7,292,189, "Methods and Apparatus for High Resolution Positioning."
- U.S. Patent No. 7,079,025, "A Reconfigurable Indoor Geolocation Systems."
- U.S. Patent No. 7,158,643, "Auto-Calibrating Surround System."
- U.S. Patent No. 5,987,380, "Hand-held GPS-mapping Device."
- U.S. Patent No. 5,902,347, "Hand-held GPS-mapping Device."
- 21. Other details concerning my background, professional service, and more, are set forth in my C.V. Ex. 1021. As my C.V. shows, my career has involved a significant amount of software development and processing.

22. In forming my opinion expressed in this report, I relied on my knowledge, skill, training, and education and over thirty-five years of professional experience in the fields of computer science and electrical engineering.

III. Materials Reviewed

23. In forming my opinions, I have reviewed the following documents:

EXHIBIT NO.	DESCRIPTION
Ex. 1001	U.S. Patent No. 7,552,118, entitled "Method Of Obtaining An
	Electronically-Stored Financial Document"
Ex. 1002	File History of U.S. Patent Application No. 14/857,854
Ex. 1003	File History of U.S. Patent Application No. 09/548,490
Ex. 1004	File History of U.S. Patent Application No. 13/272,936
Ex. 1005	File History of U.S. Patent Application No. 12/902,973
Ex. 1006	File History of U.S. Patent Application No. 10/104,541
Ex. 1007	File History of U.S. Patent Application No. 11/202,790
Ex. 1008	File History of U.S. Patent Application No. 12/489,087
Ex. 1009	File History of U.S. Patent Application No. 13/840,892
Ex. 1011	Joint Claim Construction Chart, Mirror Imaging LLC v. Suntrust
	Banks, Inc., Case No. 2:08-cv-00295-DF, Dkt. No. 191-2, (E.D.
	Tex. Feb. 16, 2010)
Ex. 1015	Robert Hudson, Finding Your Ancestors at the Troy Public
	Library, Troy Public Library
	http://www.thetroylibrary.org/pdf/FindAncestors.pdf (February
	1993)
Ex. 1021	William R. Michalson CV.
Ex. 1023	Online Computer Library Center ("OCLC"), Together We Make
	Breakthroughs Possible, available at
	http://www.oclc.org/en/about.html
Ex. 1024	Society of American Archivists, microfiche, available at
	https://www2.archivists.org/glossary/terms/m/microfiche
Ex. 1025	Online Computer Library Center ("OCLC"), Dewey Decimal
	Classification summaries, available at
	https://www.oclc.org/en/dewey/features/summaries.html
Ex. 1026	Online Computer Library Center ("OCLC"), Furthering Access
	to The World's Information for 30 Years, (1997).

Ex. 1029	U.S. Patent No. 5,784,610 to Copeland, et al. ("Copeland").	
Ex. 1028	U.S. Patent No. 6,192,165 to Irons.	
Ex. 1027	U.S. Patent No. 6,349,373 to Sitka, et al. ("Sitka).	
Ex. 1030	Muller, Computerized Document Imaging Systems, Artech	
	House, Inc. (1993).	
Ex. 1031	D'Alleyrand, Networks and Imaging Systems in a Windowed	
	Environment, Artech House, Inc. (1996).	
Ex. 1032	Robek, Information and Records Management,	
	Glencoe/McGraw-Hill, Inc. (4 th ed. 1995).	
Ex. 1033	Green, Introduction to Electronic Document Management	
	Systems, Academic Press, Inc. (1993).	
Ex. 1034	Systems Analysis of Medical Records in Georgia, Georgia	
	Institute of Technology and Westinghouse Electric Corporation,	
	Volume 1, September 1971.	

24. All of the opinions contained in this declaration are based on the documents I reviewed and my knowledge and professional judgment. My opinions have also been guided by my understanding of how a person of ordinary skill in the art would have understood the claims of the '118 patent at the time of the alleged invention. For purposes of this declaration, I understand that the date of the alleged invention is the earliest claimed priority date: April 13, 1999.

IV. Legal Standards

25. I am not an attorney, though I have been provided with an understanding of the patent law sufficient to conduct the analysis given in this report. For purposes of this declaration, I have been asked to opine only on certain issues regarding the technology at issue, and the meaning of the claims. I understand that the claims define the invention.

I have been asked to consider certain claim constructions set forth in SectionVI and considered those constructions in forming my opinions.

V. Level of Ordinary Skill in the Pertinent Art

- 27. I have been advised that there are multiple factors relevant to determining the level of ordinary skill in the pertinent art, including the educational level of active workers in the field at the time of the alleged invention, the sophistication of the technology, the type of problems encountered in the art, and the prior art solutions to those problems.
- 28. In my opinion, the Challenged Claims pertain to networking and software for business or financial activities including storing and retrieving document images over a distributed network. Additionally, I have been advised that a "person or ordinary skill in the art in the relevant field" is a hypothetical person to whom one could assign a routine task in the relevant field (*e.g.*, the field of networking or software as described above) with reasonable confidence that the task would be successfully carried out.
- 29. In order to determine the hypothetical person of ordinary skill in the art, I have considered the types of problems encountered in the art, the prior art solutions to those problems, the rapidity with which innovations are made, the sophistication of the technology, and the educational level and professional capabilities of workers in the field. I am familiar with the level

of experience required of a person of ordinary skill in the art because of my extensive educational and work history in the field of software development and engineering as well as my experience teaching and advising projects involving students of computer science and/or electrical engineering.

- 30. It is my opinion that a person having ordinary skill in the relevant art at the time of the alleged invention is a person with a degree in computer science, electrical engineering (the latter with a computer systems specialization), or equivalent training and two years of work experience with computer networking or information technology (IT) training, or the equivalent.
- 31. I have made this determination based on my interaction with large numbers of workers in the computing field who were of the level of ordinary skill in the art, as well as my own professional experience in the pertinent field. The pertinent field was the configuration and arrangement of commercially available computer components, networks, systems, and software to be used in document retrieval systems, together with any programming as might be necessary for the components of the system to operate together as desired.
- 32. I am directly familiar with the capabilities of such persons of ordinary skill in the art because of my work with students of electrical engineering and computer science, my regular interactions with practicing engineers in these fields, my degrees in electrical engineering, my practical work experience as

detailed above, and in my C.V. In 2009, I had at least this level of skill in the art, having already obtained a Bachelors, Masters, and Doctoral degree in electrical engineering and, by that time, had been working in the field for over twenty years. *See* Ex. 1021.

VI. Claim Construction

- 33. I have considered the meaning that certain claim terms would have had to those of ordinary skill in the art in order to prepare this declaration. I am of the understanding that I should use the broadest reasonable interpretation that would have been understood by one of ordinary skill in the art reading the specification at the time of the patent's filing in order to construe claims.
- 34. I understand that the United States Patent and Trademark Office interprets claim terms based on their broadest reasonable interpretation. I also understand that the standard for claim construction at the United States Patent and Trademark Office is different from the standard used in United States District Courts. I understand that a U.S. District Court interprets claim terms based on the plain and ordinary meaning, whereas the United States Patent and Trademark Office interprets claim terms based on the broadest reasonable interpretation.
- 35. I understand that the broadest reasonable interpretation may be broader in scope than the plain and ordinary meaning. Accordingly, I understand that

- the United States Patent and Trademark Office may adopt a different construction from a district court when the broadest reasonable interpretation is different from the plain and ordinary meaning.
- 36. I understand that in prior litigation, several terms of the Mirror Imaging patents or related patents have been construed by a district court, agreed to by the parties, or proposed by a district court. *See* Ex. 1011.
- 37. I have considered both the constructions provided by the district court and the broadest reasonable interpretation of the claims in forming my opinions.I offer no opinion on which claim constructions represent the correct construction of any claim term.
- 38. My opinions set forth herein are not based on any claim constructions, and are therefore the same when I consider either a broadest reasonable interpretation or the district court constructions.

VII. Overview of the Mirror Imaging Patents

39. The Mirror Imaging patents each have similar titles. The '118 and '612 patents are titled "Method of obtaining an electronically-stored financial document;" the '866 patent is titled "Method of obtaining an electronically stored financial document;" and the '067 patent is titled "Method of obtaining electronically-stored financial documents." The named inventors for the Mirror Imaging patents are Michael D. Schulze and Richard J.

- Gagnon. Each of the Mirror Imaging patents is a continuation of U.S. Patent No. 6,446,072 and claims priority to U.S. Provisional Application No. 60/129,021, filed April 13, 1999.
- 40. Since the patents are continuations of the same provisional application, the Mirror Imaging patents contain substantially the same disclosure. For simplicity, I will discuss "the Mirror Imaging patents" together and cite to the specification of the '118 patent as exemplary. All language cited to from the '118 Patent's specification also appears in the specifications of the other Mirror Imaging patents and is not contradicted by additional disclosures (if any) in the other Mirror Imaging patents.
- 41. The Mirror Imaging patents merely describe the well-known and age-old concept of storing and retrieving financial documents from multiple storage systems using basic, common, and standard document information.
- 42. I understand that the specification of the '118 Patent describes a system where financial institutions, banks, and credit unions store financial documents such as paid checks, account statements, and other related documents in on-site storage systems, off-site storage systems, or both. Ex. Ex. 1001 at 1:23-34. The '118 Patent alleges that a problem existed in the way financial institutions interfaced with on-site and off-site storage systems since the financial institutions failed to *directly* interface with both the on-

site and off-site storage systems. *Id.* at 2:6-13. That is, while on-site and off-site storage systems were admittedly well known, the purported inventors argue that financial institutions indirectly linked to off-site storage systems through the on-site storage system, and that there was allegedly no direct interface with off-site storage. *Id.* According to the '118 Patent, this rendered off-site storage inefficient, and prohibited financial institutions from outsourcing storage to third-parties. *Id.* at 1:64-2:34.

- 43. It is my understanding that the '118 Patent purports to solve the alleged deficiency by using a simple "parameter" to regulate document storage and retrieval (whether via on-site or off-site facilities). However, the alleged invention merely uses common computer components to apply the abstract concept of storing and retrieving financial documents based upon fundamental information about the document (*i.e.*, a "document parameter") as shown in Figure 1. According to the claims of the '118 Patent, a parameter may be a "numerical sequence" (Claim 12), the "age" of the document (Claim 13), a "pre-selected date" (Claim 14), or an "account number" (Claim 15), none of which may be considered complex.
- 44. According to the '118 Patent, whether a parameter is either greater than or less than a predetermined value determines whether the financial document should be stored in on-site or off-site storage. *Id.* at 2:53-3:2.

- 45. In my opinion, the alleged invention's retrieval of financial documents is trivial. According to the specification of the '118 Patent, when a financial institution receives a request for a financial document, a *financial institution employee* simply compares the financial document's "parameter" to a predetermined value. *Id.* at 2:54-59, 6:42-7:4. The '118 Patent merely encompasses age-old processes which utilize a simple, generic computer; indeed, the '118 Patent openly concedes that the "comparing" step is a mental process performed by "a bank employee, such as a bank teller." *Id.* at 6:42-7:4.
- 46. If the basic parameter is greater than a predetermined value, the employee accesses a first storage to retrieve the document; if the parameter is less than or equal to the predetermined value, the employee accesses a second storage for document retrieval. *Id.* at 2:53-3:2. Whether the employee accesses the first or second storage system can be interchanged based on a predetermined value. Having been retrieved, the requested financial document is then available for use by the financial institution or its customers/members. *Id.* at 3:14-18.
- 47. According to the '118 Patent, one of the claimed storage locations is preferably located at the financial institution bank, and the other storage is

- remotely located. *Id.* at 3:5-4:3. Allegedly, the remote location allows for a third-party to manage the storage of financial documents off-site. *Id.*
- 48. The '118 Patent fails to disclose any novel storage media, does not claim any specific software, and does not purport to improve actual on-site or off-site storage in any manner. *See id.* at 2:21-28. Rather, the alleged solution offered by the '118 Patent is to use well-known generic computer components (*i.e.*, storage media, processing units, and computer terminals) as they are commonly used, in combination with human activity, to simply store and retrieve financial documents in one of two places using conventional and routine information well-known in the prior art. *Id.* at 1:23-38, 6:32-41.
- 49. The '118 Patent did not provide any technological improvement or advancement to the interfaces which link the storage locations to a financial institution. Instead, according to the specification of the '118 Patent, the interfaces described are nothing more than common, ordinary displays for inputting information to retrieve a financial document. *Id.* at 1:44-49. The '118 Patent simply enumerates unpatentable data fields for identifying financial documents, and fails to disclose any technical details about the interfaces. For example, while the '118 Patent purports to enable a financial institution to bypass on-site storage and "directly" retrieve financial

documents from off-site storage, it lacks any disclosure concerning how that direct link is allegedly achieved, what novel hardware or software (if any) facilitates the direct link, or how the interface specifically differs from, or is in any way an improvement upon, known prior art interfaces. *Id.* at 2:21-28, 7:32-33. As such, the systems used in the '118 Patent could be any standard, generic storage and retrieval system. For example, computerized library systems, such as Online Computer Library Center ("OCLC"), have been implemented since at least 1967. Ex. 1023 at 3. OCLC interlinked libraries and archives which stored books (or documents) based on one or more specific parameters such as the Dewey Decimal Classification System or by date. See, e.g., Ex. 1025. For example, if a document had a date older than a threshold date, the document may be stored in a repository for documents older than the threshold date. Ex. 1026; see, e.g., Ex. 1025; Ex. 1015; see also Ex. 1034 at 66-72 (describing storing medical records, including as microfilm, microfiche and on a computerized system, on-site within a certain age and at remote locations after a certain age).

50. Moreover, the '118 Patent admits that the use of on-site storage systems for financial documents was not new at the time of the alleged invention, nor was the use of both on-site and off-site storage systems – or the ability to store or retrieve documents. Ex. 1001 at 2:6-7, 18-20. Beyond the

referenced generic, well-known computer components (*i.e.*, storage media, computer terminals, processing units), the '118 Patent is simply directed to an unpatentable, known method of storing and retrieving financial documents based on information that is basic and inherent to each such document. In my opinion, applying that method in the computer context and dressing up the basic financial document information as a "parameter" does not, and cannot, confer patentability. Not only do the claims seek to patent nothing more than well-known abstract ideas, as explained further below, all of the features and limitations claimed in the '118 Patent were well-known and conventional in the art at the time of the alleged invention.

VIII. The Claims Of The '118 Patent Are Directed To A "Financial Activity."

51. Many claims of the Mirror Image patents include financial related activities. For example, Claims 1 and 23 expressly require storing/maintaining, requesting, and retrieving of "financial document(s)." Claim 23 requires a "financial institution." The dependent claims are also directed to financial activity including, for example, those that recite an "account number" (Claim 15), a "check number" (Claim 16), a "payment date" (Claim 17), a "monetary amount" (Claim 18), and "distributing the reproduced financial document to a financial institution based on routing codes" (Claim 20).

- 52. It is my understanding that in a previous lawsuit, Patent Owner construed the term "financial document" to mean "a document of a *financial nature* including, but not limited to, *checks, checking account statements, and documents related to check and checking account statements.*" Ex. 1011, *Mirror Imaging LLC v. Suntrust Banks, Inc.*, Case No. 2:08-cv-00295-DF, Dkt. No. 191-2, Revised P.R.4-5(d) Joint Claim Construction Chart at 7 (E.D. Tex. Feb. 16, 2010) (emphasis added).
- 53. The claims of the '118 Patent are therefore directed to performing data processing or other operations used in the practice, administration, or management of a financial product or service (*i.e.*, storing/maintaining, requesting, and retrieving "financial document(s)").
- 54. Further, the '118 Patent explains that requests for financial documents "are typically made for replacing lost or stolen financial documents, for *tax purposes*, for proof of *financial transactions*, for legal disputes, and other similar matters." Ex. 1001 at 5:25-28 (emphasis added).
- 55. Therefore, the '118 Patent provides access to a *financial institution's* system, and is therefore directed to a financial service.

IX. The Claims Of The '118 Patent Are Not Directed To A "Technological Innovation"

56. The '118 Patent is not directed to any "technological innovation."

- 57. The '118 Patent only employs conventional computer components and well-known storage media, and therefore does not claim a novel "technological feature." Ex. 1001 at 1:23-38, 44-48, 2:6-7, 4:36-41. The '118 Patent does not provide new technological features, hardware, software, or even a novel arrangement of existing computing elements. As such, the claims of the '118 Patent merely recite a general purpose "storage system," "computer terminal," and "processing unit" arranged, and operating, in conventional ways. *Id.* at 11:19-14:43.
- 58. I understand that, in a previous lawsuit, the Patent Owner defined the term "computer terminal" to mean "a device having a display (*e.g.*, a monitor) and a data entry mechanism (*e.g.*, a keyboard and/or a mouse)." Ex. 1011 at 5. Additionally, the Patent Owner defined a "storage system" by merely referencing generic storage system functionality, such as: "related computer hardware and software that electronically stores and permits retrieval of the financial documents." *Id*.
- 59. The '118 Patent explains that "processing, retrieval and reproduction of the requested financial document is typically controlled by one interlinked computer software program," which may be one of any "frequently used software programs," for "implementing the discussed procedures." Ex. 1001 at 6:32-41. Indeed, "any of these computer software systems can provide

the necessary means for implementing the discussed procedures." *Id.* Clearly, the '118 Patent does not claim any improvement of a computing device.

The use of generic computers and storage media were well-known and 60. conventional at the time of the alleged invention. See Ex. 1026 at 12-13 ("For many libraries, the OCLC terminal was the first computer terminal they have ever seen. That was not to last long. Libraries rapidly embraced computer technology... Over time, many libraries no longer wanted the paper cards, only the electronic version.") The challenged claims use generic computers to: "stor[e] a plurality of financial documents," (or "maintain[] the financial document") "submit[] a request," (or "receiv[e] a request") and "access[] storage system[s]." *Id.* at 11:19-14:43. Electronically storing/maintaining financial documents based on unique data was well-known and a conventional practice in the area. For example, U.S. Patent No.6,192,165, filed December 30, 1997, teaches a method for a digital filing system involving indexing, imaging, storing, and retrieving of paper-based documents which are transformed into electronic documents for filing. Ex. 1028 at Abstract ("In this context, during filing refers to the efficient management of paper-based information from its receipt at the desktop through an indexing, scanning, image storage and image retrieval

process."). Furthermore, U.S. Patent No. 6,349,373, filed February 20, 1998, disclosed a digital imaging system for archiving documents based on specific characteristics found within the documents themselves. Ex. 1027 at Abstract ("A digital image management system is described which facilitates image archival with a unique method for grouping customer images and information."). Moreover, the '118 Patent admits that these methods were well known. Ex.1001 at 1:23-24 ("Methods for obtaining electronically-stored financial documents are generally known in the art."), *id.* at 1: 55-58 ("storing, downloading, and retrieving of the financial document, including the reproduction and the distribution of the document, are known in the industry...").

61. Moreover, the use of both on-site and off-site storage for financial documents was also well known and conventional. For example, U.S. Patent No. 5,784,610, filed November 21, 1994, disclosed a financial system wherein the image of a check was processed and distributed throughout a system having multiple storage locations, including at least one remote location, and the images could be retrieved from the correct storage location based on identifying information. *See* Ex. 1029 4:1-5, 4:15-18 ("a digital check image distribution and processing system is provided, the system having communication nodes located at an image capture site of the archive

system and at one or more remote archive retrieval sites" and "[t]he host then retrieves a group of digital document images from either on-line or archive storage that are identified by the transaction file"). Additionally, the Computerized Document Imaging Systems detailed in Muller describe a storage system wherein two different types of storage media can be used. See Ex. 1030 at 100 (describing a storage system using two different types of storage media, a first which allowed fast data retrieval, such as directaccess storage devices, and a second for less frequently requested documents such as archival-type media). The '118 Patent itself states that these methods are well known. See Ex. 1001 at 1: 29-31 ("Financial documents are typically electronically-stored in an on-site storage system located at the financial institution or in an off-site storage system."), id. at 2:6-7 ("financial institutions do electronically store financial documents in on-site and off-site storage systems."). Although the '118 Patent specifically discusses "financial" documents, the claimed system is no different than any categorization system, such as a computerized library system. For example, the Online Computer Library Center ("OCLC") utilized an interlinked computer software program to access books or documents of which many were in different locations. Ex. 1026 at 5 ("OCLC is a nonprofit corporation that links, via a computer network, some 24,000 libraries in 63 countries.").

Also, it was conventional practice for libraries to have a separate repository for archived documents which are older than a certain age. *See* Ex. 1015 at 4; *see also* Ex. 1034 at 66-72 (describing storing medical records, including as microfilm, microfiche and on a computerized system, on-site within a certain age and at remote locations after a certain age).

- 62. Therefore, the challenged claims do not recite any technological innovation, since the generic computer components used in the method perform nothing more than conventional functions, all of which were well-known in the art at the time of the alleged invention.
- 63. Moreover, the '118 Patent admits that submitting/receiving a request through a processing unit or a computer terminal was well-known. Ex. 1001 at 1:44-48 ("More specifically, conventional methods for obtaining an electronically-stored financial document enable an employee of the financial institution, such as a bank teller, to input the request into an interface incorporated into the computer terminal.").
- 64. The claims recite "comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been inputted."

- The "comparison," as described in the claims, was well-known and 65. conventional at the time of the alleged invention. Specifically, as described in Muller, the system for filing can use various criteria, including age of the document, the amount of activity around the document, and whether or not the document is frequently accessed in order to determine which storage system the document is to be filed in. Ex. 1030 at 5, 100, 111-112, 251; see also Ex. 1034 at 66-72 (describing storing medical records, including as microfilm, microfiche and on a computerized system, on-site within a certain age and at remote locations after a certain age). Moreover, neither the claims nor the disclosure suggest that the "comparing" step is performed using any form of allegedly new hardware or software, or a novel combination of known hardware or software components, which could be construed as a technological innovation. To the contrary, the '118 Patent teaches that no hardware or software is even necessary or contemplated; specifically the claimed "comparing" step is simply performed by "a bank employee, such as a bank teller." Ex. 1001 at 6:51-53, 7:4-5.
- 66. Also, no other claims recite any form of technological innovation. For example, Claims 2-10 merely specify the type of conventional media for storing financial documents. *Id.* at 4:34-36 ("[F]inancial documents are typically stored on microfiche, microfilm, digitally, or by some other

electronic storage means"). Storage media such as microfiche, microfilm, and other optical storage methods were well known in the art prior to the date of the alleged invention. *See* Ex. 1031 at 184 (stating that for long-term archives optical storage is the best method or provide increased storage density and allowing for electronic access from remote workstations); *see also* Ex. 1032 at 217 (describing computer generated microfilm and computer output laser disks can be used for long-term archive storage). Moreover, storage media such as microfiche and microfilm do not even require a computer. Microfiche can be printed from strips of microfilm and is merely a sheet of transparent film. Ex. 1024 at 1. As such, the dependent claims do not provide any technological innovation over the known practices at the time of the invention.

67. When viewed as a whole, the claims of the '118 Patent fail to recite any technological feature which can be considered novel and nonobvious over the prior art. The combination of multiple known storage systems does not propel the '118 Patent to have any "technological feature" not present when these elements are analyzed individually. Ex. 1001 at 1:64-2:34. Instead, the combination of these elements, even according to the '118 Patent's own characterization, allegedly only improves upon prior art systems "by providing a direct interface inter-linked with the off-site storage system." *Id.*

at 2: 2:27-28. Such improvement cannot be considered a technological feature, much less a technological innovation, because having a direct interlink to an off-site storage system was admittedly well known and invented by others, as discussed above with respect to at least Ex. 1030 and Ex. 1029. For example, OCLC provided, in 1967, a computerized interface inter-linked with multiple libraries such that books and documents could be requested and subsequently retrieved from on-site or off-site libraries. Ex. 1026 at 5 ("OCLC ... links, via a computer network, some 24,000 libraries in 63 countries"), 9 ("This shared catalog would not only provide cataloging information about materials in the library you were using, but also about materials in other libraries in the network."), 14 ("They can connect to the database via our own private telecommunications network or other networks like the CompuServe or over the Internet."); Ex. 1023 at 3.

68. Indeed, the '118 Patent admits that the processing, retrieval, and reproduction of financial documents is controlled by interlinked computer software programs which were already commercially available from various companies, including Antinori Software Incorporated and Carreker-Antinori. Ex. 1001 at 6:32-41; *see also* Ex. 1016 at 2.

- 69. The '118 Patent as a whole fails to recite any technological feature or innovation that is purportedly novel and unobvious. Therefore, the subject matter of the '118 Patent is not directed to a technological invention.
- 70. Since both on-site and off-site storage systems were already well-known in the art, the supposed problem that the '118 Patent sought to solve was not a technical problem but, instead, a business problem: reducing "back office production" and outsourcing off-site storage. Ex. 1001 at 2:23-28 ("[I]t is desirable to implement a method for a financial institution to obtain electronically-stored financial documents from both on-site and off-site storage systems that reduces, if not eliminates, the back office production [T]he responsibility for retrieving financial documents from the off-site storage can be outsourced to third party entities...").
- 71. Based on my above analysis, it is my opinion that the Challenged Claims are not directed to any "technological innovation."
- 72. The following table illustrates that the '118 Patent merely seeks to improperly monopolize the use of basic computer hardware and software to perform the decades-old process of documents being stored/maintained and retrieved based on the nature, information, and/or characteristics of those documents (*See also* Ex. 1034 at 66-72 (describing storing medical records,

including as microfilm, microfiche and on a computerized system, on-site within a certain age and at remote locations after a certain age):

Abstract Idea – Documents Stored & Retrieved by Date		
Pen/Paper/Person	Exemplary Claim 1	
Libraries and other repositories have long used methods where documents are stored in and retrieved from two storage systems based on document characteristics.	A method of obtaining an electronically- stored financial document from a first storage system remotely-located from a second storage system wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents include [is associated with] at least one specific document parameter, said method comprising the steps of:	
A library stores documents having a certain date range in one repository. Ex. 1015 at 4 (e.g., vital records for "marriages" stored "in closet (Ask for assistance)" for years "1980-1984" and "1989-1990").	storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter;	
A library stores documents having a different date range in a different repository. Ex. 1015 at 4 (e.g., vital records for "marriages" stored "in card catalog" for years "1985-1988").	storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter;	
A library patron may access either document repository at the library. <i>See</i> Ex. 1015 at 4.	utilizing a computer terminal connected to the first and second storage systems though a processing unit;	
A library patron may request a document having a certain date from a librarian. See Ex. 1015 at 4.	submitting a request for at least one of the stored financial documents into the computer terminal;	

Abstract Idea – Documents Stored & Retrieved by Date		
Pen/Paper/Person	Exemplary Claim 1	
The librarian compares the requested document date to the fixed dates of the respective repositories. <i>See</i> Ex. 1015 at 4.	comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been inputted;	
The relevant repository is accessed, depending on the date of the requested document. <i>See</i> Ex. 1015 at 4 (<i>e.g.</i> , vital records for "marriages" stored "in closet (Ask for assistance)" for years "1980-1984" and "1989-1990"; vital records for "marriages" stored "in card catalog" for years "1985-1988").	automatically accessing the first storage system through the processing unit when the specific document parameter is greater than the predetermined parameter and automatically accessing the second storage system though the processing unit when the specific document parameter is less than or equal to the predetermined parameter; and	
The requested document is retrieved from the relevant repository. <i>See</i> Ex. 1015 at 4 (<i>e.g.</i> , vital records for "marriages" stored "in closet (Ask for assistance)" for years "1980-1984" and "1989-1990"; vital records for "marriages" stored "in card catalog" for years "1985-1988").	document, as defined by the inputted	

73. As clearly laid out above, the challenged claims each require "undisputedly well-known" steps of storing/maintaining and retrieving financial documents from a well-known type of storage media.

- 74. The Challenged Claims are merely directed to storing/maintaining and retrieving financial documents based upon a generic data point. The documents are simply stored or maintained according to basic data -- "document parameter" (such as a date) -- and then retrieved based on known and basic parameters as described in detail above.
- 75. As such, the alleged claimed invention of the '118 Patent merely uses generic, general purpose, computers in their known manner. Although the '118 Patent asserts that it allegedly improves upon known systems by directing the storage and retrieval of financial documents into one of two databases by employing a piece of known information, such as a date, there is no legitimate basis to contend the Challenged Claims recite a technological improvement. The Challenged Claims do not.

X. The Challenged Claims Do Not Include an "Inventive Concept"

76. The Challenged Claims do not disclose any method which could be considered an inventive concept based on the prior art and knowledge in the field. The computing components recited in the '118 Patent are generic, general-purpose computer components which add nothing to the patent-ineligible, abstract idea of a method for storage/maintenance and retrieval of financial documents. For example, any generic, standard computer, such as a PC, can be used to perform the functions described in the '118 Patent.

- 77. The specification makes clear that "the computer terminals and the accompanying PC bases are illustrated highly schematically in FIG. 1 and are not intended to be limiting in any manner." Ex. 1001 at 6:21-24. The '118 Patent also admits that implementation details were well-known in the industry prior to the earliest priority date of the '118 Patent, as discussed in detail in Section IX above (citing Ex. 1027, Ex. 1028, Ex. 1029, Ex. 1030, Ex. 1031, and Ex. 1032). *See* Ex.1001 at 6:40-41 ("Any of these computer software systems can provide the necessary means for implementing the discussed procedures"), *id.* at 4:39-41 ("One such digital electronic storage device is sold by Kodak under the name of IMAGELINK™ Digital Workstation (IDW)").
- 78. Moreover, the limitations of the Challenged Claims do not even have to be performed by computing devices. For example, all of the challenged claims simply recite steps for: (1) storing/maintaining; (2) requesting; and (3) retrieving financial documents. *Id.* at 2:38-3:10. These steps, viewed individually or together, do no more than disguise generic steps which have been routinely performed by humans and is commonly performed by general-purpose computers, namely: (1) storing/maintaining information; (2) submitting/receiving an input; and (3) retrieving the information. For example, the '118 Patent recites "[t]he customer service tracking system

enables a bank employee, such as a bank teller, to submit the request." *Id.* at 7:5-6. Thus, even though the claims "require the use of computers,' the recitations are not meaningful limitations on the scope of the claims." Since these computing device steps do not provide such meaningful limitations, the Patent Owner cannot rely on these steps as providing an inventive concept.

A. The Limitations Of The Independent Claims Do Not Constitute An "Inventive Concept"

Limitations 1[A], 1[B], 23[A], and 23[B]: ¹ storing/maintaining financial documents at a first/off-site storage system and a second/on-site storage system

79. Claim 1 recites "storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter," and "storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter."

¹ To the extent the preambles may be deemed limiting, they likewise add no inventive concept. The preambles merely restate the claimed abstract idea, for example, using generic "storage system" components and thus do not add an inventive concept to that abstract idea. *See Ultramercial*, 772 F.3d at 715-16.

- Claim 23 recites limitations that are substantially parallel to the limitations as described in Claim 1, above. Only insignificant phrasing changes are made between the independent claims.
- 80. The '118 Patent admits that storage systems for storing financial documents were not new at the time of the alleged invention. Ex. 1001 at 1:29-31 ("These financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means"); see also id. at 4:39-41 ("One such digital electronic storage device is sold by Kodak under the name of IMAGELINKTM Digital Workstation (IDW)"); see also discussion in XI above (citing Ex. 1027, Ex. 1028, Ex. 1029, Ex. 1030, Ex. 1031, and Ex. 1032). As such, beyond identifying pre-existing and well-known storage systems, the '118 Patent provides absolutely no detail regarding any specific structures for the storage systems or their operations required in order to perform the claimed methods. Moreover, as the '118 provides that microfiche and microfilm can be used, a computer is not even necessary. See Ex. 1024.
- 81. Furthermore, the '118 Patent also admits that storing/maintaining financial documents in both a first, or on-site, storage system and a second, or off-site, storage system was well known at the time of the alleged invention.

 Ex.1001 at 2:6-7 ("Other financial institutions do electronically store

financial documents in on-site and off-site storage systems"). Accordingly, the specification admits that the claimed storage systems merely perform basic and routine computer functions such as storing/maintaining information, all of which was well known in the art. This is no different than a computerized library system which links multiple libraries, such as OCLC (see. Ex. 1026 at 5, 9, 14 ("They can connect the database via our own private telecommunications network or other networks like the CompuVerse or over the Internet.")), or any other document storage system (see discussion of Ex. 1030, above). Outside of identifying pre-existing and well-known storage systems, the '118 Patent does not provide any detail regarding any required, specific, inventive structure of the storage systems or their operations.

82. Claim 1 also recites that the financial documents are stored "in a first fixed medium," and "in a second fixed medium." This merely specifies the number of storage media to store the "financial documents," and does not provide any inventive method or concept for storing such data. The broad category of a "fixed medium" remains generic. Furthermore, as described above, methods for storing documents in different types of fixed media based on specific document criteria were well known at the time. *See* Ex. 1030 at 100. The '118 Patent itself even clearly states that the use of such

media, which may not even need any computer components, to store financial documents was indisputably well-known at the time of the alleged invention. Ex. 1001 at 1:29-31 ("These financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means.").

Limitations 1[C] and 23[C]: utilizing a computer terminal connected to the first/off-site and second/on-site storage systems through a processing unit

- 83. Claim 1 recites "utilizing a computer terminal connected to the first and second storage systems though a processing unit." Claim 23 recites limitations which are substantially parallel to those of Claim 1, as shown in detail above. Similar to the "storage system" limitations discussed above, the "computer terminal," and "processing unit" limitations recited in these limitations are also transparently generic and are discussed in more detail below.
- 84. Like the "storage system" limitations discussed above, the utilization of computer terminals to input requests for specific documents was well-known and conventional (*see* Ex. 1030 at 111-112, Figure 7.1 (describing the use of an IBM ImagePlus document imaging system to image and manage movement of the documents throughout the storage hierarchy), the '118 Patent admits the same (*see* Ex. 1001 at 1:43-48). With respect to these

features, the '118 Patent concedes that the step may be performed by a person. Specifically, the "client's request is inputted into a computer terminal at the financial institution. More specifically, conventional methods for obtaining an electronically-stored financial document enable an employee of the financial institution, such as a bank teller, to input the request into an interface incorporated into the computer terminal." Id. (emphasis added).

85. This is no different than using a computer connected to two libraries as done by OCLC since 1967. Ex. 1023 at 3. Therefore, utilizing a computer terminal fails to provide any inventive steps.

Limitations 1[D] and 23[D]: submitting a request for the financial document(s) into the computer terminal

- 86. Claim 1 recites "submitting a request for at least one of the stored financial documents into the computer terminal." Claim 23 recites limitations which are substantially parallel to those of Claim 1, as shown in detail above. Similar to the limitations discussed above, the steps recited in these limitations merely recite incidental use of generic general-purpose computer components.
- 87. Submitting and receiving requests were both well known in the industry and manually performed, and the '118 Patent even admits the same. Ex. 1001 at 1:45-48 ("conventional methods for obtaining an electronically-stored

financial document enable an employee of the financial institution, such as a bank teller, to input the request into an interface incorporated into the computer terminal."), *id.* at 1:40-43 ("Client requests are made to replace lost or stolen documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters."). For a request to be submitted or received, a person must be involved. Therefore, submitting a request into a computer terminal does not provide any inventive steps.

Limitations 1[E] and 23[E]: comparing the specific document parameter/age of the requested financial document to the predetermined parameter/age to determine if the specific document parameter/age is greater than, less than, or equal to the predetermined parameter/age after the request has been inputted

88. Claim 1 recites "comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been inputted." Claim 23 recites limitations that substantially parallel those of Claim 1. Limitations 1[E] and 23[E] only serve to compare document parameters (*e.g.*, a document's date) with a predetermined value (*e.g.*, a set date). As such, these limitations merely recite the use of existing technology to recognize and store well-known data points. *See* Ex. 1030 at 100 (selecting specific storage locations and media based on data within the stored documents); *see*

also Ex. 1034 at 66-72 (describing storing medical records, including as microfilm, microfiche and on a computerized system, on-site within a certain age and at remote locations after a certain age).

89. Furthermore, the specification of the '118 Patent specifically contemplates manual performance of the comparing step. Specifically, "[a] bank employee, such as a bank teller first determines a status of the requested document. More specifically, the employee compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. If the specific document parameter is a particular numerical sequence and the predetermined parameter is a predetermined numerical value, then the employee compares the particular numerical sequence of the financial document to the predetermined numerical value to determine if the particular numerical sequence is greater than, less than, or equal to the predetermined numerical value. Further, if as in the preferred embodiment, the particular numerical sequence is a record date of the financial document, and the predetermined numerical value is a pre-selected date, then the employee compares the record date of the financial document to the pre-selected date to determined if the record date is later than, earlier than, or equal to the pre-selected date." Ex. 1001 at 6:53-7:4 (emphasis added).

90. These comparisons are not different than those used by librarians since at least the 1870's to retrieve a book by comparing its title to an alphabetical order or by comparing its numerical code to the Dewey Decimal Classification System. Ex. 1025 at 1; Ex. 1015 at 4. For example, in the Dewey Decimal Classification System, a document is given a number which provides classification information, such as topic (e.g., technology, dogs, cats, etc.). Ex. 1025 at 2. Also, if a book or document is older than a certain age, the document may be stored in a repository in a separate location. Ex. 1015 at 4; see also Ex. 1034 at 66-72 (describing storing medical records, including as microfilm, microfiche and on a computerized system, on-site within a certain age and at remote locations after a certain age). Knowing the classification then informs the person the location of the stored document. As such, the person determines the storage location of the document based on whether the number for the document is higher or lower than the numbers for the documents stored in that location. Neither the challenged claims nor the specification provide any detail as to how the claimed methods implement the steps of comparison, as such the claim limitations cannot be considered to add any inventive concept to the patent.

Limitations 1[F], 1[G], 23[F], and 23[G]: automatically accessing and retrieving the financial document from the first/off-site storage system or the second/on-site storage system through the processing unit

- Claim 1 recites the steps of "automatically accessing the first storage system 91. through the processing unit when the specific document parameter is greater than the predetermined parameter and automatically accessing the second storage system though the processing unit when the specific document parameter is less than or equal to the predetermined parameter," and "retrieving the requested financial document, as defined by the inputted request, in the first fixed medium when the specific document parameter is greater than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is less than or equal to the predetermined parameter." Claim 23 recites limitations which substantially parallel those of Claim 1. The claims use a lot of words to describe well-known and generic steps of retrieving documents from generic storage systems using a computer.
- 92. These processes have long been prevalent in our systems for commerce and other activities, and have been performed by humans for as long as recorded information has been stored. The claims simply take a request for information of a certain age or description, and locate that information based on the criteria which were used to govern where the information was stored

in the first place. Specifically, these limitations amount to nothing more than retrieving financial documents from different storage locations. For example, librarians have long stored books and documents based on bibliographic data or categorization systems such as alphabetical order, the Dewey Decimal Classification System, age, and a plethora of other systems. *See, e.g.*, Ex. 1025; Ex. 1015 at 4.

The '118 Patent asserts that the "processing, retrieval and reproduction of 93. the requested financial document is typically controlled by one interlinked computer software program," which can be one of any "frequently used software programs," for "implementing the discussed procedures." Ex. 1001 at 6:40-41 ("Any of these computer software systems can provide the necessary means for implementing the discussed procedures."). However, this is nothing more than a method using generic, general purpose, computers and software to perform a known process. Indeed, the '118 Patent even admits that "storing, downloading, and retrieving of the financial document, including the reproduction and the distribution of the document, are known in the industry..." Id. at 1:55-58. As such, these limitations were well known to those of ordinary skill in the art at the time. For example, OCLC digitized libraries to provide research collections and support, bringing together multiple library catalogs or storage systems through an interlinked computer system. Ex. 1023 at 3.

94. As accessing and retrieving documents from generic storage systems has been done by ancient humans and the addition of generic computers has been done since at least 1967, the claim limitations cannot be considered to add any inventive concept to the patent.

B. The Dependent Claims Do Not Transform the Claims into An "Inventive Concept"

95. Claims 3-9, 11, and 37-40 merely attempt to specify the type of medium in which the financial documents are stored. However, as explained above, the use of such media to store financial documents was well known at the time. and the '118 Patent concedes the same. Ex.1001 at 1:29-31 ("These financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means."). Claims 2 and 10 merely require two of either the same or different mediums, requiring either "the first and second fixed mediums are different from each other," or "the first and second fixed mediums are the same." However, using the multiple storage media of either the same or different types was common and wellknown at the time of the alleged invention. See Ex. 1030 at 100 (describing different types of storage media selected based on characteristics of the Moreover, nothing in the specification teaches or stored documents).

- suggests having two of either the same or different storage media was novel, meaningful, or in any way impacted the operation of the claimed method.
- 96. Claims 12-18 specify so-called document parameters; however, these claims simply identify a set of information fields for facilitating what are otherwise conventional and well-known steps of storing and retrieving financial documents. *See* Ex. 1030 at 5, 100, 111-112, 251; *see also* Ex. 1029 4:1-5, 4:15-18; *See also* Ex. 1031 at 310.
- 97. Claims 19 and 20 recite the additional step of "reproducing the requested financial document after the requested financial document has been retrieved from the associated storage system," and "distributing the reproduced financial document to a financial institution based on routing codes." These limitations likewise merely recite steps that were well-known and conventional in the industry (printing and distributing). *See* Ex. 1001 at 1:55-58 ("The storing, downloading, and retrieving of the financial document, including the reproduction and the distribution of the document, are known in the industry as back office production."). As such, these claims are directed to a "well-understood, routine, conventional activit[y] previously known to the industry," just like the human and generic computer steps recited in the independent claims. Accordingly, such steps do

- constitute an inventive concept. Claims 24, 25, 26, and 30 recite similar limitations to locate the requested financial document and are unpatentable.
- 98. Claims 21 and 36 specify that the steps of accessing the first and second storage systems access only one of the storage systems at a time. Accessing one storage medium at a time was common and well-known; for example OCLC had the ability to access one library's catalog at a time. Ex. 1026.
- 99. Claim 22 recites the step of "including an outsourcing institution associated with the second storage system." As such, Claim 22 merely recites the business objective of having an "outsourcing institution" involved in the claimed method to achieve a desired result or outcome.
- 100. Claims 27-32 include additional, common steps such as feeding, downloading, transmitting, reproducing, and categorizing the requests and requested financial documents with the computer terminal and processing unit. These claims and their limitations merely invoke generic "computer terminals" and "processing units" to perform common, computer functions and behave exactly as expected according to their ordinary use.
- 101. Claims 33-34 include the steps of determining a sequence number and image reference number of the requested financial document. However, the '118 Patent admits that the components for doing so were well known in the art at the time. Ex. 1001 at 4:33-45 ("As appreciated, the electronic storage of the

financial documents is frequently created by taking an electronic photo image of the document and storing the photo image in a computer system. One such digital electronic storage device is sold by Kodak under the name of IMAGELINK™ Digital Workstation (IDW)."); *see also* Ex. 1033 (describing using micrographic systems to capture an image in order to store document materials); *see also* Ex. 1030 at 108, 130, 174 (describing use of the IBM Image Plus, Hewlett Packard UNIX, and DECimage Express systems to store information).

- 102. Claim 35 recites locating the requested financial document, a step well-known and conventional in the industry. As a well-understood, routine, conventional activity previously known to the industry, this claim also does not constitute an inventive concept.
- 103. Therefore, none of the dependent claims transform the claims into an "inventive concept."

XI. CONCLUSION

104. In summary, it is my opinion that claims 1-40 of the '118 Patent are directed to the age-old process of organizing, storing, and retrieving documents based on document characteristics which can be performed by mental processes and manual activities. Further, the use of generic computers or computer

components fail to add any inventive concept to the process, as doing so was routine and conventional when the '118 Patent was filed.

I, William R. Michalson, do hereby declare and state, 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, under Section 1001 of Title 18 of the United States Code.

Executed on: _____10 January 2018

By: _______