UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

EMC CORPORATION and VMWARE, INC., Petitioners,

v.

PERSONALWEB TECHNOLOGIES, LLC and LEVEL 3 COMMUNICATIONS, LLC, Patent Owners.

> Case IPR2013-00083 Patent 6,415,280 B1

Before KEVIN F. TURNER, JONI Y. CHANG, and MICHAEL R. ZECHER, *Administrative Patent Judges*.

ZECHER, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. BACKGROUND

EMC Corporation and VMware, Inc. (collectively, "EMC") filed a Petition on December 15, 2012, requesting an *inter partes* review of independent claims 36 and 38 of U.S. Patent No. 6,415,280 B1 (Ex. 1001, "the '280 patent"). Paper 6 ("Pet."). PersonalWeb Technologies, LLC and Level 3 Communications, LLC (collectively, "PersonalWeb") timely filed a Patent Owner's Preliminary Response. Paper 14 ("Prelim. Resp."). Taking into account PersonalWeb's Preliminary Response, the Board determined that the information presented in the Petition demonstrated that there was a reasonable likelihood that EMC would prevail in challenging independent claims 36 and 38 as unpatentable under 35 U.S.C. §§ 102(e) and 103(a). Pursuant to 35 U.S.C. § 314, the Board instituted this proceeding on May 17, 2013, as to the challenged claims of the '280 patent. Paper 19 ("Dec.").

During this proceeding, PersonalWeb timely filed a Patent Owner Response (Paper 45, "PO Resp."), and EMC timely filed a reply to the Patent Owner Response (Paper 51, "Reply"). A consolidated oral hearing was held on December 16, 2013.¹

We have jurisdiction under 35 U.S.C. § 6(c). This decision is a final written decision under 35 U.S.C. § 318(a) as to the patentability of the challenged claims. Based on the record before us, EMC has demonstrated

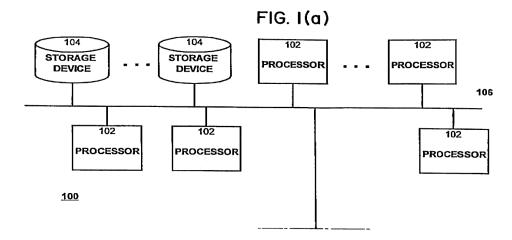
¹ This proceeding, as well as IPR2013-00082, IPR2013-00084, IPR2013-00085, IPR2013-00086, and IPR2013-00087, involve the same parties and similar issues. The oral arguments for all six *inter partes* reviews were merged and conducted at the same time. A transcript of the oral hearing is included in the record as Paper 79.

by a preponderance of the evidence that independent claims 36 and 38 are unpatentable.

A. The Invention of the '280 Patent

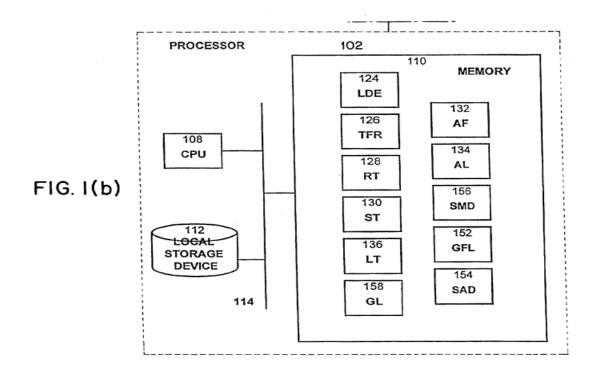
The invention of the '280 patent relates to a data processing system that identifies data items using substantially unique identifiers, otherwise referred to as True Names, which depend on all the data in the data item and only on the data in the data item. Ex. 1001, 1:12-16, 3:28-31, 6:7-9. According to the '280 patent, the identity of a data item depends only on the data and is independent of the data item's name, origin, location, address, or other information not directly derivable from the data. Ex. 1001, 3:32-34. The invention of the '280 patent also examines the identities of a plurality of data items in order to determine whether a particular data item is present in the data processing system. Ex. 1001, 3:35-38.

Figures 1(a) and 1(b) illustrate the data processing system that implements the invention of the '280 patent. Ex. 1001, 4:45-47. Figure 1(a) is reproduced below.



As shown in Figure 1(a), data processing system 100 includes one or more processors 102 and various storage devices 104 connected via bus 106. Ex. 1001, 4:59-64.

Figure 1(b) is reproduced below.



As shown in Figure 1(b), each processor 102 includes central processing unit 108, memory 110, and one or more local storage devices 112 connected via internal bus 114. Ex. 1001, 4:65-5:1. Memory 110 in each processor 102 stores data structures that are either local to the processor, itself, or shared amongst multiple processors in the data processing system. Ex. 1001, 7:65-8:13.

The '280 patent further discloses accessing data items by referencing their identities or True Names independent of their present location in the data processing system. Ex. 1001, 34:20-22. The actual data item or True File corresponding to a given data identifier or True Name is capable of

residing anywhere on the data processing system, i.e., locally, remotely, offline, etc. Ex. 1001, 34:22-24. If a requested data item or True File is local with respect to the data processing system, a prospective user can access the data in the True File. Ex. 1001, 34:24-26. If a requested data item or True File is not local with respect to the data processing system, a prospective user may use the True File registry to determine the location of copies of the True File according to its given True Name. Ex. 1001, 34:26-30. However, if for some reason a prospective user cannot locate a copy of the requested data item or True File, the processor employed by the user may invoke the Request True File remote mechanism to submit a general request for the data item or True File to all the processors in the data processing system. Ex. 1001, 34:34-40.

B. Challenged Claims

Independent claims 36 and 38 are the only claims challenged by EMC in this proceeding and are reproduced below:

36. A method of delivering a data file in a network comprising a plurality of processors, some of the processors being servers and some of the processors being clients, the method comprising:

storing the data file is [sic] on a first server in the network and storing copies of the data file on a set of servers in the network distinct from the first server; and

responsive to a client request for the data file, the request including a hash of the contents of the data file, causing the data file to be provided to the client.

Ex. 1001, 43:54-63.

38. A method of delivering a data file in a network comprising a plurality of processors, some of the processors being servers and some of the processors being clients, the method comprising: storing the data file is [sic] on a first server and storing copies of the data file on a set of servers distinct from the first server; and

responsive to a client request for the data file, the request including a value determined as a given function of the contents of the data file, providing the data file to the client.

Ex. 1001, 44:3-13.

C. Related Proceedings

EMC indicates that the '280 patent was asserted against it in *PersonalWeb Technologies LLC v. EMC Corporation and VMware, Inc.,* No. 6:11-cv-00660-LED, pending in the United States District Court for the Eastern District of Texas. Pet. 1. EMC also filed five other petitions seeking *inter partes* review of the following patents: (1) U.S. Patent No. 5,978,791 ("the '791 patent") (*EMC Corp. and VMware, Inc. v. PersonalWeb Techs., LLC,* IPR2013-00082); (2) U.S. Patent No. 7,945,544 (*EMC Corp. v. PersonalWeb Techs., LLC,* IPR2013-00084); (3) U.S. Patent No. 7,945,539 (*EMC Corp. v. PersonalWeb Techs., LLC,* IPR2013-00085); (4) U.S. Patent No. 7,949,662 (*EMC Corp. v. PersonalWeb Techs.,* LLC, IPR2013-00086); and (5) U.S. Patent No. 8,001,096 (*EMC Corp. v. PersonalWeb Techs., LLC,* IPR2013-00087). *Id.*

D. Prior Art Relied Upon

EMC relies upon the following prior art reference:

Woodhill US 5,649,196 July 15, 1997 Ex. 1005 (effectively filed July 1, 1993)

E. Grounds of Unpatentability

We instituted this proceeding based on the grounds of unpatentability set forth in the table below.

Claims	Basis	Reference
36 and 38	§ 102(e)	Woodhill
36 and 38	§ 103(a)	Woodhill

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, we construe a claim by applying the broadest reasonable interpretation in light of the specification of the patent in which it appears. 37 C.F.R. § 42.100(b); *see* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012). There is a "heavy presumption" that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). However, a "claim term will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history." *Id.* "Although an inventor is indeed free to define the specific terms used to describe his or her invention, this must be done with reasonable clarity, deliberateness, and precision." *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

In its Petition, EMC identified six claim terms and provided a claim construction for those terms. Pet. 6-7. Those claim terms are listed as follows: (1) "data" and "data item"; (2) "file system"; (3) "file"; (4) "location"; (5) "local"; and (6) "True Name, data identity, and data identifier." *Id.* In the Decision to Institute, we indicated that only the claim terms "data" and "file" are used together as "data file" in independent claims 36 and 38. Dec. 10. Based on an explicit or special definition for the claim

term "file" in the specification of the '280 patent, we construed the claim term "data file" as "a named data item, such as a simple file that includes a single, fixed sequence of data bytes or a compound file that includes multiple, fixed sequences of data bytes." *Id.* at 10-11 (citing Ex. 1001, 5:47-54). We also concluded that the preambles of independent claims 36 and 38 are entitled to patentable weight. *Id.* at 9-10. In its Patent Owner Response, PersonalWeb indicated that it agrees with our claim construction of the claim term "data file," as well as our conclusion that the preambles of independent claims 36 and 38 are entitled to patentable weight. PO Resp. 1-2 (quoting Dec. 10-11).

B. The Level of Ordinary Skill in the Art

In determining the level of one with ordinary skill in the art, we note that various factors may be considered, including "type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field." *In re GPAC*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citing *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.,* 807 F.2d 955, 962 (Fed. Cir. 1986)). There is sufficient evidence in the record before us that reflects the knowledge level of a person with ordinary skill in the art. PersonalWeb's expert, Dr. Robert B.K. Dewar, attests that a person with ordinary skill in the art would be an individual with a bachelor's degree in computer science who possesses ten to fifteen years of teaching or work experience in the field of data processing systems. Ex. 2013 ¶ 18.

C. Anticipation by Woodhill—Independent Claims 36 and 38

EMC contends that independent claims 36 and 38 are anticipated under § 102(e) by Woodhill. Pet. 39-47. In support of that alleged ground of unpatentability, EMC provides explanations as to how Woodhill describes each claim limitation. *Id.* (citing Ex. 1032). EMC also submits the declarations of Dr. Douglas W. Clark (Ex. 1009 ¶¶ 23-27; Ex. 1078) to support its positions. Upon reviewing EMC's Petition and supporting evidence, as well as PersonalWeb's Patent Owner Response and supporting evidence, we determine that EMC has demonstrated by a preponderance of the evidence that independent claims 36 and 38 are anticipated by Woodhill.

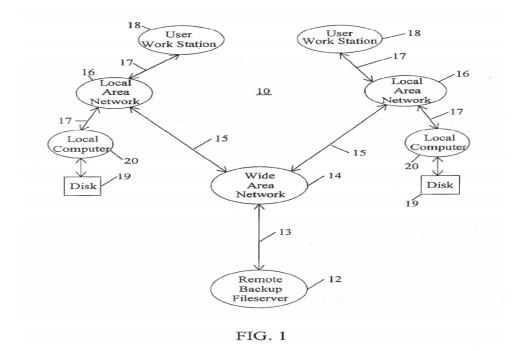
We begin our analysis with the principles of law that generally apply to a ground of unpatentability based on anticipation, followed by a brief discussion of Woodhill, and then we turn to the arguments presented by both EMC and PersonalWeb that are directed towards each challenged claim.

1. Principles of Law

To establish anticipation under § 102(e), "all of the elements and limitations of the claim must be shown in a single prior reference, arranged as in the claim." *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). We analyze the ground of unpatentability based on anticipation by Woodhill with the above-stated principles in mind.

2. Woodhill

Woodhill generally relates to a system and method for distributed storage management on a networked computer system that includes a remote backup file server in communication with one or more local area networks. Ex. 1005, 1:11-17. Figure 1 of Woodhill, which is reproduced below, illustrates networked computer system 10. Ex. 1005, 2:56-58.



As shown in Figure 1 of Woodhill, remote backup file server 12 communicates with wide area network 14 via data path 13, wide area network 14 communicates with a plurality of local area networks 16 via data paths 15, and each local area network 16 communicates with multiple user workstations 18 and local computers 20 via data paths 17. Ex. 1005, 3:12-31. The storage space on each disk drive 19 on each local computer 20 is allocated according to the hierarchy illustrated in Figure 2. Ex. 1005, 3:31-44.

Figure 2 of Woodhill, which is reproduced below, illustrates Distributed Storage Manager program 24 that allocates storage space on each of the storage devices in networked computer system 10. Ex. 1005, 2:59-62.

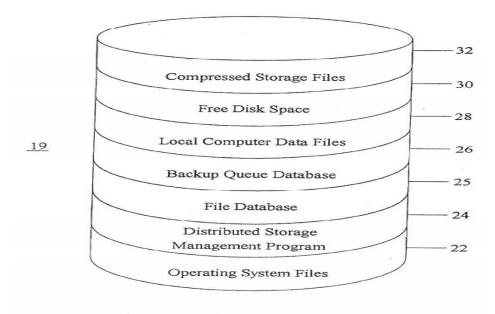


FIG.	2

As shown in Figure 2 of Woodhill, Distributed Storage Manager program 24 builds and maintains File Database 25 on the one or more disk drives 19 on each local computer 20 in networked computer system 10. Ex. 1005, 3:45-49. Distributed Storage Manager program 24 views a file as a collection of data streams. Ex. 1005, 4:13-15. Woodhill defines a data stream as a distinct collection of data within a file that may change independently from other distinct collections of data within the file. Ex. 1005, 4:15-18. For instance, Woodhill discloses that a file may contain both its normal data and any extended attribute data. Ex. 1004, 4:18-19. Depending on the size of the data stream, Distributed Storage Manager

program 24 divides each data stream into one or more binary objects.

Ex. 1005, 4:21-30.

Figure 3 of Woodhill, which is reproduced below, illustrates File Database 25 used by Distributed Storage Manager program 24. Ex. 1005, 2:63-64.

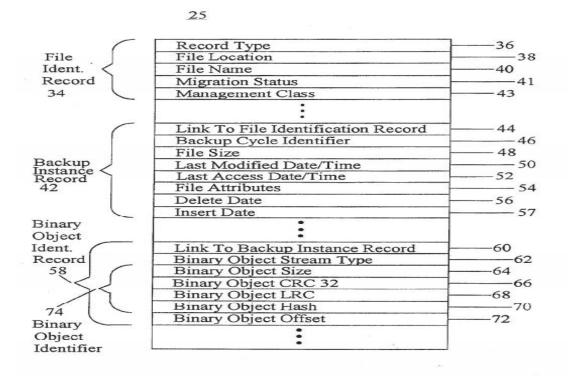


FIG. 3

As shown in Figure 3 of Woodhill, File Database 25 includes the following three levels of records organized according to a predefined hierarchy: (1) File Identification Record 34; (2) Backup Instance Record 42; and (3) Binary Object Identification Record 58. Ex. 1005, 3:54-4:47. Binary Object Identification Record 58 includes, amongst other things, Binary Object Identifier 74 that comprises Binary Object Size 64, Binary Object CRC32 66, Binary Object LRC 68, and Binary Object Hash 70.

Ex. 1005, 4:45-47, 7:64-8:1. Binary Object Identifier 74 is a unique identifier for each binary object that is backed up. Ex. 1005, 4:45-47.

Although Woodhill discloses calculating Binary Object Identifier 74 in various ways, e.g., using a binary hash algorithm (Ex.1005, 8:1-31), the key notion is that Binary Object Identifier 74 is calculated from the content of the data instead of from an external or arbitrary source. Ex. 1005, 8:38-42. In other words, Woodhill recognizes that the critical feature in creating Binary Object Identifier 74 is that the identifier should be based on the contents of the binary object, such that Binary Object Identifier 74 changes when the contents of the binary object changes. Ex. 1005, 8:58-62. Therefore, duplicate binary objects, even if resident on different types of computers in the network, may be recognized by their identical Binary Object Identifiers 74. Ex. 1005, 8:62-65.

Woodhill discloses that Distributed Storage Manager program 24 performs two backup operations concurrently. Ex. 1005, 9:30-31. First, Distributed Storage Manager program 24 stores a compressed copy of each binary object that it needs to restore disk drive 19 on each local computer 20 somewhere on local area network 16 other than on local computer 20 where the binary object originally resided. Ex. 1005, 9:31-36. Second, Distributed Storage Manager program 24 transmits new or changed binary objects to remote backup file server 12. Ex. 1005, 9:36-38.

Woodhill also discloses that Distributed Storage Manager program 24 performs auditing and reporting functions on a periodic basis to ensure that binary objects, which already have been backed up, may be restored. Ex. 1005, 18:11-13. Distributed Storage Manager program 24 initiates a

restore of a randomly selected binary object identified by a Binary Object Identification Record 58 stored in File Database 25. Ex. 1005, 18:16-19.

3. Independent Claim 36

a. "a request for the data file from a client, where the request includes a hash of contents of the data file"

Independent claim 36 recites, in relevant part, "responsive to *a client request for the data file, the request including a hash of the contents of the data file, causing the data file to be provided to the client.*" Ex. 1001, 43:62-64 (emphasis added).

In its Petition, EMC contends that Woodhill discloses that a local computer, i.e., a client, can request that a binary object be restored. Pet. 45 (citing Ex. 1005, 10:27-32). According to EMC, Dr. Clark confirms that such a request includes Binary Object Identifier 74 with a hash of the contents of the requested binary object. *Id.* (citing Ex. 1009 ¶ 26). EMC argues that the binary object is provided to the local computer in response to such a request. *Id.* In addition to relying upon Woodhill's backup procedure to support its position, EMC's claim chart also directs us to Woodhill's self-auditing procedure to describe the disputed limitation. Ex. 1032, 4-5 (citing Ex. 1005, 18:11-23).

In its Patent Owner Response, PersonalWeb contends that, during Woodhill's self-auditing procedure, a randomly selected binary object is identified by Binary Object Identification record 58 stored in File Database 25. PO Resp. 3-4 (citing Ex. 1005, 18:10-38; Ex. 2013 ¶¶ 102-04). PersonalWeb argues that Woodhill's Binary Object Identifier 74 is not included in any such "request," but rather is used for comparison purposes after the binary object associated therewith already has been accessed in

order to determine if the audit restore worked properly. *Id.* at 4 (citing Ex. 1005, 18:28-38; Ex. 2013 ¶ 103). PersonalWeb further argues that, although Woodhill's Binary Object Identification record 58 identifies a particular binary object, Woodhill discloses that the record is stored in File Database 25 and never discloses that the record is part of the request for the binary object. *Id.* (citing Ex. 1005, 8:16-19; Ex. 2013 ¶ 104). PersonalWeb also asserts that EMC's expert, Dr. Clark, acknowledged that Woodhill fails to disclose that Binary Object Identifier 74 is part of a request. *Id.* at 5-6 (citing Ex. 2008, 167-68, 172-73).

In its Reply, EMC contends that, during Woodhill's self-auditing procedure, Distributed Storage Manager program 24 "initiates a restore of a ... binary object identified by a Binary Object Identification Record 58." Reply 2 (quoting Ex. 1005, 18:12-20 (emphasis omitted)). EMC argues that Woodhill's Binary Object Identification Record 58 includes Binary Object Identifier 74, and the identifier, itself, includes Binary Object hash field 70 that represents a hash of the contents of the binary object. *Id.* (citing PO Resp. 4; *see also* Ex. 1005, 8:38-65, fig. 3; Ex. 1074, 136). According to EMC, Dr. Clark confirms that Binary Object Identifier 74 within Binary Object Identification Record 58 is used to identify and request binary objects to restore to the local computer. *Id.* at 3 (Ex. 1078 ¶¶ 8-15).

EMC further contends that, contrary to PersonalWeb's argument that Dr. Clark acknowledges that Woodhill fails to disclose that Binary Object Identifier 74 is part of the request, Dr. Clark has maintained unequivocally that the restore requests include Binary Object Identification Record 58 and that record clearly includes hashes in Binary Object Identifier 74. *Id.* at 4 (citing Ex. 2008, 216-17). EMC argues that it is self-evident that Woodhill's

Binary Object Identifier 74 within Binary Object Identification Record 58 is used to identify and access a binary object. *Id.* at 4-5. According to EMC, this is why Woodhill refers to Binary Object Identifier 74 as an "identifier," and also why independent claim 1 of Woodhill refers to it as a "name." *Id.* at 5 (citing Ex. 1005, 22:3-4).

As we explained in the Decision to Institute (Dec. 15-17), Woodhill discloses that Distributed Storage Manager program 24 performs auditing and reporting functions on a periodic basis in order to ensure that the binary objects, which already have been backed up, may be restored. Ex. 1005, 18:11-13. According to Woodhill, Distributed Storage Manager program 24 initiates a restore of a randomly selected binary object identified by Binary Object Identification Record 58 stored in File Database 25. Ex. 1005, 18:16-19. Binary Object Identification Record 58 includes, amongst other things, a Binary Object Identifier 74, which is a unique identifier for each binary object. Ex. 1005, 4:35-47, 7:64-8:1. Binary Object Identifier 74 includes, amongst other things, Binary Object Hash field 70, which is calculated against the contents of the binary object taken one word, i.e., 16-bytes, at a time using a binary hash algorithm. Ex. 1005, 7:64-8:32.

We are not persuaded by PersonalWeb's argument that Woodhill does not use Binary Object Identifier 74, which is part of Binary Object Identification record 58, to identify and request a particular binary object. Upon reviewing Woodhill's description of Binary Object Identification record 58, the only part of the record that identifies uniquely the binary object associated therewith is Binary Object Identifier 74. Ex. 1005, 4:45-47, 8:33-65. Moreover, Woodhill discloses that Binary Object Hash field

70, which is one of four fields that comprise Binary Object Identifier 74, is a hash of contents of the binary object, itself. Ex. 1005, 8:21-23.

Therefore, during Woodhill's self-auditing procedure, we determine that Distributed Storage Manager program 24 uses Binary Object Identifier 74 to identify and request a randomly selected binary object by retrieving its corresponding Binary Object Identification record 58 in File Database 25. *See* Ex. 1005, 18:16-19. Given that Woodhill's Binary Object Identifier 74 includes Binary Object Hash field 70, such a request necessarily encompasses a hash of contents of the binary object, itself. Ex. 1005, 7:64-8:32. Dr. Clark confirms that such an operation was routine because it was old and well-known to identify and request objects using their identifiers. *See* Ex. 1078 ¶¶ 10, 11. We credit Dr. Clark's testimony because it is consistent with a general understanding of how one with ordinary skill in the art would use an identifier for basic file management functions, e.g., using an identifier to identify and request a record stored in a database.

Next, we are not persuaded by PersonalWeb's argument that, during the self-auditing procedure, Binary Object Identifier 74 merely is used for comparison purposes after the particular binary object already has been accessed to determine if the audit restore worked properly. As we explained above, the only part of Binary Object Identification record 58 that identifies uniquely the binary object associated therewith is Binary Object Identifier 74. Ex. 1005, 4:45-47, 8:33-65. Consequently, during Woodhill's selfauditing procedure, Binary Object Identifier 74 serves the following two purposes: (1) Distributed Storage Manager program 24 uses Binary Object Identifier 74 to request a randomly selected binary object by retrieving its corresponding Binary Object Identification record 58 in File Database 25

(*see* Ex. 1005, 18:16-19); and (2) Binary Object Identifier 74, which is stored as part of the randomly selected Binary Object Identification record 58, is compared with Binary Object Identifier 74 previously calculated by Distributed Storage Manager program 24 in order to confirm whether the audit restore was successful (Ex. 1005, 18:28-38).

In summary, we agree with EMC that Woodhill's self-auditing procedure, which includes using Binary Object Hash field 70 in Binary Object Identifier 74 to identify and request a randomly selected binary object by retrieving its corresponding Binary Object Identification record 58 in File Database 25, describes the method step of "responsive to a client request for the data file, the request including a hash of the contents of the data file, causing the data file to be provided to the client," as recited in independent claim 36.

b. "a data file" and "a hash of the contents of the data file"

Independent claim 36 recites, in relevant part, "a method of delivering *a data file* in a network. . . [and a] request including *a hash of the contents of the data file*." Ex. 1001, 43:55-63 (emphasis added).

In its Petition, EMC contends that Woodhill's binary objects constitute the claimed "data files." Pet. 44; *see* Ex. 1032, 3. In particular, EMC argues that Woodhill discloses storing binary objects, i.e., the claimed "data files," on local computer 20, and storing copies of the binary objects on at least one other local computer 20, as well as on remote backup file server 12. *Id.* at 44-45 (citing Ex. 1005, 4:14-26, 9:42-44, fig. 1); *see* Ex. 1032, 3 (citing Ex. 1005, 9:30-38).

In its Patent Owner Response, PersonalWeb contends that Woodhill's binary object is not a claimed "data file" because the binary object is not a

"named data item." PO Resp. 6 (citing Ex. 2013 ¶¶ 105-06). In particular, PersonalWeb argues that Woodhill's binary objects are identified by respective Binary Object Identifiers 74; however, PersonalWeb asserts that Binary Object Identifiers 74 are not file names. *Id.* at 7 (citing Ex. 1005, 4:45-46; Ex. 2013 ¶ 106). PersonalWeb then argues that, because Woodhill's Binary Object Identifier 74 is not a file name, it follows that a binary object is not a "named data item." *Id*.

In addition, PersonalWeb argues that, according to the specification of the '280 patent, the claimed "a hash of the contents of the data file" requires that the hash must be *all the data* in the data file. *Id.* at 7-8 (citing Ex. 1001, 1:14-16, 3:29-31, 33:1-7) (emphasis added). PersonalWeb then argues that, although Woodhill discloses that Binary Object Identifier 74 includes Binary Object hash field 70 resulting from the application of a hash function to a binary object, Woodhill fails to disclose a hash of all the data in the data file, as required by independent claim 36. *Id.* at 8 (citing Ex. 2013 ¶ 106).

In its Reply, EMC contends that, contrary to PersonalWeb's arguments that Woodhill's binary objects are not named and Binary Object Identifiers 74 are not file names, independent claim 36 does not require that the request for a data file include a file name, or even a name. Reply 6. Instead, EMC argues that independent claim 36 only requires that the request be "for a data file," i.e., for a name data item, and that the request include "a hash of the contents of the data file." *Id.* at 6-7 (citing Ex. 1001, 43:62-64). EMC then relies upon its previous explanation of Woodhill's self-auditing procedure to support its position that Woodhill describes "a data file" and "a hash of the contents of the data file," as recited in

independent claim 36. *Id.* at 7 (citing Ex. 1005, 17:18-45, 18:16-19; Ex. 1078 ¶¶ 8-15).

EMC further argues that, even if we were to accept PersonalWeb's overly narrow claim construction, Woodhill discloses data files that have only a single binary object, and Binary Object Identifier 74 is the name of the binary object associated therewith. Reply 8 (citing Ex. 1005, 1:66-2:3, 22:3-4). According to EMC, Dr. Clark confirms that Woodhill's data files that contain a single binary object may be named by their file name, in addition to being named by Binary Object Identifier 74. *Id.* at 9 (citing Ex. 1078 ¶¶ 4-7). EMC also disagrees with PersonalWeb's argument that the hash included in the request must be based on all the data in the data file because such a construction is overly narrow, is not consistent with the broadest reasonable interpretation of independent claim 36, and would exclude the preferred embodiment in the '280 patent. *Id.* at 7-8 (citing Ex. 1001, 21:30-50, 34:4-8; Ex. 1078 ¶ 14).

As we explained in the Decision on Institution, we construed the claim term "data file" as "a name data item, such as a simple file that includes a single, fixed sequence of data bytes or a compound file that includes multiple, fixed sequences of data bytes." Dec. 10-11 (citing Ex. 1001, 5:44-54). The focus of the dispute between EMC and PersonalWeb is not whether a single binary in Woodhill constitutes a single, fixed sequence of data bytes, or whether multiple binary objects in Woodhill constitute multiple, fixed sequence of data bytes. Instead, the focus of the dispute between EMC and PersonalWeb is whether EMC and PersonalWeb is whether a single binary object is used, the focus of the dispute between EMC and PersonalWeb is whether Woodhill's binary object constitutes a "named data item," as required by our claim construction of the claim term "data file."

We are not persuaded by PersonalWeb's argument that Woodhill's binary object is not a claimed "data file" because the binary object is not a "named data item." Woodhill explicitly discloses "data files comprised of *one or more* binary objects." Ex. 1005, 2:3 (emphasis added). Independent claim 1 of Woodhill further recites a "means for dividing each data file into *one or more binary* objects of a predetermined size." Ex. 1005, 21:64-65 (emphasis added). Woodhill also discloses that, if a data file is less than one megabyte, then a single binary object represents a data file. *See, e.g.*, Ex. 1003, 4:23-26; Ex. 1078 ¶ 5. Finally, as we discussed previously, Woodhill discloses that Binary Object Identifier 74 uniquely identifies the binary object associated therewith. Ex. 1005, 4:45-47, 8:33-65. Therefore, consistent with our claim construction of the claim term "data file," a single binary object in Woodhill constitutes a claimed "data file" because it constitutes a data item that is identified uniquely by its corresponding Binary Object Identifier 74.

For instance, in the scenario where a single binary object in Woodhill constitutes a claimed "data file," Dr. Clark confirms that that such a binary object would be named by its corresponding Binary Object Identifier 74, in addition to its File Name 40 as illustrated in Figure 3 of Woodhill. Ex. 1078 ¶ 7. We credit Dr. Clark's testimony because it is consistent with Woodhill's disclosure that a data file may include one binary object that is identified uniquely by its corresponding Binary Object Identifier 74 (Ex. 1005, 2:3, 4:45-47, 8:33-65), as well as Woodhill's disclosure regarding File Name 40 (Ex. 1005, 3:61). Based on the above-identified disclosures in Woodhill, as well as Dr. Clark's supporting testimony, we agree with EMC that a single binary object in Woodhill constitutes the claimed "data file."

We are not persuaded by PersonalWeb's argument that, according to the specification of the '280 patent, the claimed "a hash of the contents of the data file" requires that the hash must be of *all the data* in the data file. Ex. 1001, 43:63 (emphasis added). PersonalWeb's argument is not commensurate in scope with independent claim 36. Independent claim 36 simply recites "the request including a hash of the contents of the data file." It does not indicate explicitly whether the claimed "hash" must be of all the data in the data file. To support its construction that the claimed "hash of the contents of the data file" requires that the hash must be of all the data in the data file, PersonalWeb directs us to the disclosure in the specification of the '280 patent regarding substantially unique identifiers, otherwise referred to as True Names, for a data item. See, e.g., Ex. 1001, 1:14-16, 3:29-31, 33:1-7. However, we note that independent claim 36 does not recite a "substantially unique identifier," or a "True Name," and, therefore, it would be improper for us to read the requirements of these terms from the specification into independent claim 36. See In re Van Geuns, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

As we discussed previously, during Woodhill's self-auditing procedure, Distributed Storage Manager program 24 uses Binary Object Identifier 74 to identify and request a randomly selected binary object by retrieving its corresponding Binary Object Identification record 58 in File Database 25. *See* Ex. 1005, 18:16-19. Given that Woodhill's Binary Object Identifier 74 includes Binary Object Hash field 70, such a request necessarily encompasses a hash of contents of the binary object, itself. Ex. 1005, 7:64-8:32. Based on those cited disclosures, we agree with EMC that Woodhill's self-auditing procedure, which includes using Binary Object

Hash field 70 in Binary Object Identifier 74 to identify and request a randomly selected binary object by retrieving its corresponding Binary Object Identification record 58 in File Database 25, describes "[a] request including a hash of the contents of the data file," as recited in independent claim 36.

Nonetheless, even if we were to assume that the claimed "a hash of the contents of the data file" requires that the hash must be of all the data in the data file, Woodhill still discloses a scenario that would satisfy such a requirement. In light of our analysis above, there is sufficient evidence to support a finding that a single binary object in Woodhill constitutes a claimed "data file." *See* Ex. 1005, 2:3, 4:23-26, 21:64-65. In that scenario, Woodhill would hash all the data in the data file simply by processing one binary object.

c. A single binary object in Woodhill constitutes the claimed "data file"

In its Patent Owner Response, PersonalWeb contends that Woodhill fails to disclose a named "data file" that consists of only one binary object. PO Resp. 8. PersonalWeb argues that, even if a data file in Woodhill includes only one binary object, this does not mean necessarily that the binary object makes up the entire data file. *Id.* (citing Ex. 2013 ¶ 107). PersonalWeb argues that data in one of Woodhill's data files may very well include both metadata and the binary object. *Id.* (citing Ex. 1005, 4:18-19). Therefore, PersonalWeb asserts that, in the scenario where a data file in Woodhill includes both metadata and the binary object, the hash of that binary object does not include necessarily a "hash of the contents of the data file," as required by independent claim 36. *Id.* at 8-9.

In Reply, EMC contends that Woodhill discloses that a named "data

file" may consist of only one binary object. Reply 12 (citing Ex. 1005, 1:66-2:3, 3:54-61, 21:64-65). In that scenario, EMC argues that Woodhill's Binary Object Identifier 74 necessarily would include a hash of the contents of the binary object or data file associated therewith. *Id.* (citing Ex. 1005, 8:58-60). According to EMC, Dr. Clark confirms that Woodhill discloses files having a single binary object where the hash of the binary object is a hash of the entire contents of the file. *Id.* (citing Ex. 1078 ¶¶ 4-6).

We are not persuaded by PersonalWeb's argument that Woodhill fails to disclose a named "data file" that consists of only one binary object. As we explained previously, Woodhill discloses at least one scenario where a data file consists of a single binary object. Woodhill explicitly discloses "data files comprised of *one or more* binary objects." Ex. 1005, 2:3 (emphasis added). Independent claim 1 of Woodhill further recites a "means for dividing each data file into *one or more binary* objects of a predetermined size." Ex. 1005, 21:64-65 (emphasis added). Woodhill also discloses that, if a data file is less than one megabyte, then a single binary object represents a data file. *See, e.g.*, Ex. 1003, 4:23-26; Ex. 1078 ¶ 5. Based on these cited disclosures in Woodhill, we agree with EMC that a single binary object in Woodhill constitutes a claimed "data file."

We also are not persuaded by PersonalWeb's argument that, in the scenario where a data file in Woodhill includes both metadata and a single binary object, the hash of that binary object does not include necessarily a "hash of the contents of the data file," as required by independent claim 36. PersonalWeb's argument is predicated on the notion that the claimed "a hash of the contents of the data file" requires that the hash must be of all the data in the data file. However, as we explained previously, the claimed "a hash

of the contents of the data file" does not require that the hash must be of all the data in the data file. Moreover, PersonalWeb's proposed scenario where a data file in Woodhill includes both metadata and the binary object is merely an example. The relevant disclosure is Woodhill states: *"For example*, a file *may* contain its normal data and *may also* contain extended attribute data." Ex. 1005, 4:18-19 (emphasis added). The use of permissive terms, such as "for example" and "may," clearly indicates that a data file in Woodhill is not required to include both metadata and a single binary object.

Nonetheless, even if we were to assume that the claimed "a hash of the contents of the data file" requires that the hash must be of all the data in the data file, Woodhill still discloses a scenario that would satisfy such a requirement. In light of our analysis above, there is sufficient evidence to support a finding that a single binary object in Woodhill, which does not include additional metadata, constitutes a claimed "data file." Ex. 1005, 2:3, 4:23-26, 21:64-65. In that scenario, Woodhill would hash all the data in the data file simply by processing one binary object.

d. Woodhill does not provide a lexicographic definition for a data file that indicates it includes at least two data streams or binary objects

In its Patent Owner Response, PersonalWeb contends that Woodhill explicitly defines a data file that is subject to both the backup procedure and the self-auditing procedure as requiring at least two data streams or binary objects. PO Resp. 9 (citing Ex. 1005, 4:15-23; Ex. 2013 ¶ 108.) PersonalWeb asserts that the Board agreed in the Decision to Institute that Woodhill defines a data file in this manner. *Id.* (citing Dec. 14). Using this explicit or special definition of a data file in Woodhill, PersonalWeb argues that Woodhill fails to disclose applying a hash to a combination of at least two binary objects of a file. *Id.* at 10. PersonalWeb then asserts that Woodhill fails to disclose the claimed "hash of the contents of a data file" because each file backed up in Woodhill has at least two binary objects, and Woodhill fails to disclose applying a hash to a combination of binary objects. *Id.*

In its Reply, EMC contends that PersonalWeb's argument that Woodhill's data file must have two data streams or binary objects is misplaced. Reply 11. In particular, EMC argues that Woodhill does not provide an explicit or special definition for a data file that requires it to have at least two data streams or binary objects. *Id.* EMC also argues that there is no basis for PersonalWeb's argument that the Board agreed in the Decision to Institute that Woodhill defines a data file in that manner. *Id.* (citing Dec. 14.) Instead, EMC argues that the Board, in the Decision to Institute, simply reiterated the actual text of Woodhill and never suggested that it qualified as an explicit or special definition for a data file. *Id.*

We are not persuaded by PersonalWeb's argument that Woodhill provides an explicit or special definition for a data file that requires it to have at least two data streams or binary objects. The relevant portion of Woodhill's disclosure is reproduced below.

The Distributed Storage Manager program 24 views a file as collection of data streams. A data stream is defined as a distinct collection of data within the file that may be changed independently from other distinct collections of data with the file... The Distributed Storage Manager program 24 further divides each data stream into one or more binary objects.

Ex. 1005, 4:13-23.

Although Woodhill discloses that Distributed Storage Manager program 24 views a file as a collection of data streams, it does not set forth a definition for a data file with reasonable clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In other words, Woodhill does not define explicitly a data file as requiring at least two data streams or binary objects. To the contrary, Woodhill discloses on at least two occasions that a data file may consist of only one binary object. *See, e.g.*, Ex. 1005, 2:3, 21:64-65.

We also disagree with PersonalWeb's assertion that we explicitly defined a data file in the Decision on Institute as requiring at least two data streams or binary objects. When providing a general summary of Woodhill's disclosure, we simply reiterated the relevant disclosure in Woodhill reproduced above. Dec. 14 (citing Ex. 1005, 13-30). We did not state, nor did we suggest, that Woodhill provides an explicit or special definition for a data file. PersonalWeb's allegation to the contrary is a mischaracterization of our Decision to Institute.

In summary, we maintain that Woodhill's self-auditing procedure, which includes using Binary Object Hash field 70 in Binary Object Identifier 74 to identify and request a randomly selected binary object by retrieving its corresponding Binary Object Identification record 58 in File Database 25, describes "[a] request including a hash of the contents of the data file," as recited in independent claim 36. For the foregoing reasons, we conclude that EMC has demonstrated by a preponderance of the evidence that independent claim 36 is anticipated by Woodhill.

4. Independent Claim 38

PersonalWeb relies upon essentially the same arguments presented against independent claim 36 to rebut the explanations provided by EMC as to how Woodhill describes independent claim 38. PO Resp. 11. For the same reasons discussed above with respect to independent claim 36, PersonalWeb's arguments are not persuasive. Therefore, we conclude that EMC has demonstrated by a preponderance of the evidence that independent claim 38 is anticipated by Woodhill.

D. Obviousness over Woodhill—Independent Claims 36 and 38

EMC contends that independent claims 36 and 38 are unpatentable under § 103(a) over Woodhill. Pet. 47-48. In support of that alleged ground of unpatentability, EMC provides explanations as to how Woodhill teaches or suggests each claim limitation. *Id.* (citing Ex. 1032). EMC also submits the declaration of Dr. Clark (Ex. 1009 ¶¶ 28-29) to support its positions. Upon reviewing EMC's Petition and supporting evidence, as well as PersonalWeb's Patent Owner Response and supporting evidence, we determine that EMC has demonstrated by a preponderance of the evidence that independent claims 36 and 38 are obvious over Woodhill.

We begin our analysis with the principles of law that generally apply to a ground of unpatentability based on obviousness, and then we turn to the arguments presented by both EMC and PersonalWeb that are directed to whether Woodhill, as a whole, would have taught or suggested "storing copies of the data file on a set of servers in the network distinct from the first server," as recited in independent claims 36 and 38, to one with ordinary skill in the art.

1. Principles of Law

A patent claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, which include the following: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). We also recognize that prior art references must be "considered together with the knowledge of one of ordinary skill in the pertinent art." *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). We analyze the ground of unpatentability based on obviousness over Woodhill with the aboveidentified principles in mind.

2. PersonalWeb's Contentions

a. There are no deficiencies in Woodhill to cure

At the outset, PersonalWeb contends that EMC's contentions regarding obviousness do not cure the deficiencies in Woodhill that are discussed above with respect to independent claims 36 and 38. PO Resp. 11. As we explained in our discussion of the ground of unpatentability based on anticipation by Woodhill, there are no such deficiencies in Woodhill to cure. b. Woodhill, as a whole, would have taught or suggested the claimed "storing copies of the data file on a set of servers in the network distinct from the first server" to one with ordinary skill in the art

Independent claims 36 and 38 both recite, in relevant part, "storing copies of the data file on a set of servers in the network distinct from the first server." Ex. 1001, 43:60-61, 44:7-9.

In its Petition, EMC contends that, to the extent PersonalWeb asserts that Woodhill does not disclose the claimed "storing the data file is [sic] on a first server and storing copies of the data file on a set of servers [in the network] distinct from the first server," a person of ordinary skill in the art would have found it obvious to modify Woodhill to satisfy that claim limitation. Pet. 47 (citing Ex. 1009 ¶¶ 28, 29). EMC argues that distributing files in a network that includes many servers was old and well known in the art. Id. EMC further argues that it would have been obvious to one with ordinary skill in the art to add a remote backup file server or servers to Woodhill's system for additional data security, e.g., in the event that remote backup file server 12 is destroyed concurrently with local computers 20 on which a binary object is backed up. Id. (citing Ex. 1009 ¶ 29). According to EMC, Dr. Clark confirms that adding a remote backup file server or servers to Woodhill's system would constitute applying a known technique, such as adding extra redundancy, to a known device ready for improvement to yield predictable results. Id.

In its Patent Owner Response, PersonalWeb contends that, even if Woodhill was modified to add a remote backup file server or servers, as asserted by EMC, there would have been no logical reason to make such a modification. PO Resp. 11-12. In its Reply, EMC reiterates that Dr. Clark

confirms that it would have been well within the routine creativity of one with ordinary skill in the art to add a remote backup file server or servers to the system disclosed in Woodhill. Reply 12 (citing Ex. 1009 \P 29).

As illustrated in Figure 1 of Woodhill, which was reproduced previously, network computer system 10 includes remote backup file server 12 and local computers 20 connected via multiple local area networks 16. Ex. 1005, 3:6-31. Woodhill further discloses storing a copy of each binary object in the following three locations: (1) on local computer 20; (2) on another local computer 20 other than local computer 20 where the binary object originally resided; and (3) on remote backup file server 12. Ex. 1005, 9:30-38. Based on these cited disclosures, Woodhill describes "storing the data file is [sic] on a first server and storing copies of the data file on a set of servers in the network distinct from the first server," as recited in independent claims 36 and 38.

Nonetheless, even if we assume that Woodhill does not disclose the claimed "storing copies of the data file on a set of servers in the network distinct from the first server," we agree with EMC that the distribution of binary objects or files in a network computer system containing multiple servers is both old and well known in the art. According to Dr. Clark, a person of ordinary skill in the art would have found it obvious to add a remote backup file server or servers to Woodhill's system for additional data security, such that if Woodhill's remote backup file server 12 is destroyed along with local computers 20, copies of each binary object or file may be preserved on the newly added remote backup file server or servers. *See* Ex. 1009 ¶ 29 (citing Ex. 1005, 9:40-45). In our view, such a modification to Woodhill amounts to nothing more than the combination of familiar

elements according to a known method that predictably would result in ensuring that at least one copy of each binary object or file is preserved and not destroyed. *See KSR*, 550 U.S. at 416.

In summary, EMC has presented sufficient evidence that Woodhill, as a whole, would have taught or suggested "storing copies of the data file on a set of servers in the network distinct from the first server," as recited in independent claims 36 and 38, to one with ordinary skill in the art.

c. Secondary Considerations of Non-Obviousness—Licenses

In its Patent Owner Response, PersonalWeb contends that third parties have licensed the '791 patent and any continuations thereof, which includes the '280 patent at issue in this proceeding. PO Resp. 12. PersonalWeb argues that, because third parties have licensed these patents, evidence of non-obviousness exists that outweighs the evidence of obviousness based on Woodhill presented by EMC this proceeding. *Id.* In support of its argument, PersonalWeb directs us to three licensing agreements (Exs. 2010-12), as well as the declaration of Kevin Bermeister (Ex. 2009 ¶¶ 3-9), and then argues that each license granted to a third party was not for the purpose of settling a patent infringement suit. *Id.*

In its Reply, EMC contends that PersonalWeb has failed to establish a sufficient nexus between independent claims 36 and 38 and the aboveidentified licensing agreements. Reply 12. EMC argues that PersonalWeb does not provide any evidence that independent claims 36 and 38 motivated the decision to grant these licensing agreements, and each of the three licenses involved related parties with interlocking ownership and business interests. *Id.* at 12-13. We agree with EMC that PersonalWeb has failed to

establish the requisite nexus between the licensing agreements and the claimed subject matter recited in independent claims 36 and 38.

A party relying on licensing activities as evidence of non-obviousness must demonstrate a nexus between those activities and the subject matter of the claims at issue. *GPAC*, 57 F.3d at 1580. Further, without a showing of nexus, "the mere existence of . . . licenses is insufficient to overcome the conclusion of obviousness" when there is a strong ground of unpatentability based on obviousness. *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1358 (Fed. Cir. 2000); *see Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004).

The evidence of non-obviousness presented by PersonalWeb falls short of demonstrating the required nexus in two respects. First, neither PersonalWeb nor the declaration of Mr. Bermeister (Ex. 2009) establishes that the licensing agreements (Exs. 2010-12) are directed to the claimed subject matter recited in independent claims 36 and 38. For instance, PersonalWeb does not present credible or sufficient evidence that the three licensing agreements arose out of recognition and acceptance of the claimed subject matter recited in independent claims 36 and 38. In the absence of an established nexus with the claimed invention, secondary consideration factors are entitled little weight, and generally have no bearing on the legal issue of obviousness. *See In re Vamco Machine & Tool, Inc.*, 752 F.2d 1564, 1577 (Fed. Cir. 1985). Second, even if we assume that the aboveidentified licenses establish some degree of industry respect for the claimed subject matter recited in independent claims 36 and 38, that success is outweighed by evidence of obviousness over Woodhill discussed above.

Based on the record before us, including the evidence of obviousness based on Woodhill and the evidence of secondary considerations regarding licensing activities, we conclude that EMC has demonstrated by a preponderance of the evidence that independent claims 36 and 38 are obvious over Woodhill.

E. PersonalWeb's Motion to Exclude

PersonalWeb seeks to exclude the following evidence: (1) paragraph 10 of the rebuttal declaration of Dr. Clark that relies on, and cites to, Langer because it is irrelevant, prejudicial, confusing, lacking foundation, and beyond the scope of this proceeding; (2) Langer, because it is not authenticated properly under Federal Rule of Evidence ("FRE") 901; (3) Langer, because it includes impermissible hearsay, in violation of FRE 802; and (4) paragraphs 7 and 13 of the rebuttal declaration of Dr. Clark because he relies upon subject matter in Woodhill that does not qualify as prior art to the '280 patent. Paper 60 ("PO Mot."). EMC opposes PersonalWeb's motion to exclude. Paper 69 ("Pet. Opp."). In response, PersonalWeb filed a reply to EMC's opposition to its motion to exclude. Paper 73 ("PO Reply"). For the reasons discussed below, PersonalWeb's motion to exclude is denied.

1. The statements in Dr. Clark's rebuttal declaration regarding Langer are admissible evidence

PersonalWeb contends that paragraph 10 of the rebuttal declaration of Dr. Clark (Ex. 1078) should be excluded because this paragraph relies upon, and cites to, Langer (Ex. 1003). PO Mot. 1. PersonalWeb argues that this proceeding was instituted based only on Woodhill—not on Langer—and, therefore, EMC's reliance on Langer is outside the scope of this proceeding

and impermissible. *Id.* In response, EMC contends that Dr. Clark's testimony regarding Langer was offered in response to PersonalWeb's argument that Woodhill does not disclose a "client request" including a hash of the contents of a data file. Pet. Opp. 1-2. EMC also argues that Dr. Clark's testimony serves to corroborate the state of the art at the time of the '280 patent, as well as the requisite detail needed for such a basic computer operation. In reply, PersonalWeb contends that EMC improperly relies on Langer as alleged prior art and attempts to shoehorn into the record additional teachings not disclosed or suggested in Woodhill. PO Reply 1.

We agree with EMC that it may rely upon Langer to corroborate the state of the art at the time of the '280 patent, as well as the requisite detail needed for a basic computer operation. The '280 patent has an effective filing date of April 11, 1995. Ex. 1001 at [62]. Langer has a publication date of August, 7, 1991. Ex. 1003, 1. Therefore, Langer has a publication date prior to April 11, 1995. We recognize that Langer was relied on by EMC's rebuttal declarant, Dr. Clark, to indicate that it was old and well known to request binary objects using their identifiers (Ex. 1078 ¶ 10), and it is the type of document that experts in the pertinent field reasonably would rely on to formulate their opinions. In other words, EMC may rely on Langer to demonstrate what one with ordinary skill in the pertinent art would have known about basic computer operations at the time of the '280 patent, such as a client request that includes an identifier.

For the foregoing reasons, we are not persuaded that PersonalWeb has presented a sufficient basis to exclude paragraph 10 of the rebuttal declaration of Dr. Clark.

2. EMC provides sufficient evidence to support a finding that Langer has been authenticated properly

PersonalWeb contends that EMC fails to provide evidence indicating that Langer existed prior to the effective filing date of the '280 patent— April 11, 1995—and, therefore, should be excluded under FRE 901. PO Mot. 2. In particular, PersonalWeb argues that Langer allegedly was downloaded from the Internet in 2003 based on the "7/29/2003" date in the lower, right-hand corner. *Id*. PersonalWeb also argues that authentication of Langer requires personal knowledge of its existence prior to April 11, 1995. *Id*. at 3. In response, EMC contends that it submitted sworn testimony from Mr. Keith Moore that properly authenticates Langer under FREs 901(b)(1) and (4), 901(b)(3), 901(b)(8), and 901(b)(6) and (7). Pet. Opp. 2-4 (citing Ex. 1048 ¶¶ 5-11). In reply, PersonalWeb contends that Langer is not authenticated properly under the FREs identified by EMC. PO Reply. 1-5.

We agree with EMC that Langer has been authenticated properly under FRE 901(b)(1) and (4) because Mr. Moore testified that Langer is an article posted on Usenet newsgroups on August 7, 1991 (Ex. 1048 ¶¶ 11-15), and it includes distinct header fields unique to Usenet formatting and content (*id.* at ¶¶ 16,17). Although PersonalWeb presents several theories that attack the authenticity of Langer, PersonalWeb fails to explain adequately why the testimony offered by Mr. Moore does not authenticate Langer. PersonalWeb simply presents attorney arguments and does not offer testimony from its own expert that is contrary to the testimony offered by Mr. Moore. Therefore, based on the record before us, EMC has presented sufficient evidence to support a finding that Langer has been authenticated properly under FRE 901(b)(1) and (4).

We also are not persuaded by PersonalWeb's argument that the download date of "7/29/2003" in the lower, right-hand corner calls into question whether Langer existed prior to April 11, 1995. The mere fact that a "downloaded" copy of Langer has a date subsequent to the earliest effective filing date is not sufficient to rebut EMC's supporting evidence that Langer is what it claims to be—namely an article posted on Usenet newsgroups on August 7, 1991. *See, e.g.*, Ex. 1048 ¶¶ 11-17.

To the extent PersonalWeb argues that Mr. Moore cannot authenticate Langer because he does not have personal knowledge of its existence prior to April 11, 1995, or that Mr. Albert Langer is the only person that can authenticate Langer properly, we disagree. Neither a declaration from Mr. Langer, nor evidence of someone actually viewing Langer prior to April 11, 1995, is required to support a finding that Langer is what it claims to be. *See In re Wyer*, 655 F.2d 221, 226 (CCPA 1981) (Notwithstanding that there is no evidence concerning actual viewing or dissemination of any copy of the Australian application, the court held that "the contents of the application were sufficiently accessible to the public and to persons skilled in the pertinent art to qualify as a 'printed publication."); *In re Bayer*, 568 F.2d 1357, 1361 (CCPA 1978) (A reference constitutes a "printed publication" under 35 U.S.C. § 102(b) as long as a presumption is raised that the portion of the public concerned with the art would have known of the invention.).

For the foregoing reasons, we are not persuaded that PersonalWeb has presented a sufficient basis to exclude Langer as unauthenticated evidence.

3. Langer is not inadmissible hearsay

PersonalWeb contends that the dates in Langer, or any other information that purports to establish a publication date for Langer, are inadmissible hearsay under FRE 802 and not subject to any hearsay exception. PO Mot. 3-4. PersonalWeb also argues that, to the extent that EMC contends that any statements in Langer were made prior to the critical date of the '280 patent, the entirety of Langer is inadmissible hearsay. *Id.* at 4. In response, EMC contends that Langer is not hearsay because it is being offered for what it describes—not for the truth of its disclosure. Pet. Opp. 4. EMC also argues that the August 7, 1991, posting date on Langer's header and its uniform resource locator ("URL") both were generated automatically by the hosting computer and, therefore, are admissible as nonhearsay to prove Langer's August 1991 publication date. *Id.* at 4-5 (citing Ex. 1048 ¶ 7). In reply, PersonalWeb maintains that the dates and other information in Langer used to establish its availability as of August 1991 amount to inadmissible hearsay. PO Reply 5.

We recognize that EMC's rebuttal declarant, Mr. Moore, reasonably would rely on the date of August 7, 1991, that appears in both Langer's header and URL to formulate his opinion on whether Langer was available publicly as of that date. Accordingly, the date of August 7, 1991, posted in Langer need not be admissible for the testimony of Mr. Moore to be admissible. Nonetheless, we agree with EMC that the date of August 7, 1991, posted on Langer's header and URL serve a non-hearsay purpose for which it can be admitted—namely to prove that the document was available publicly as of that date.

Moreover, we are not persuaded by PersonalWeb's arguments that Langer, in its entirety, constitutes hearsay. With the exception of the dates in Langer, PersonalWeb does not identify specifically the textual portions of Langer that allegedly are being offered for the truth of the matter asserted, yet does seek to exclude Langer in its entirety. We will not go through the entirety of Langer and determine which portions PersonalWeb believes to be hearsay—this is something that PersonalWeb should have done in its motion to exclude.

Accordingly, we are not persuaded that PersonalWeb has presented a sufficient basis to exclude the dates posted in Langer, or any statements made therein, as impermissible hearsay.

4. The statements in Dr. Clark's rebuttal declaration that rely on the claim language of Woodhill are admissible

PersonalWeb contends that paragraphs 7 and 13 of Dr. Clark's rebuttal declaration (Ex. 1078) that rely upon, and cite to, the claims of Woodhill should be excluded as irrelevant, prejudicial, confusing, lacking foundation, and beyond the scope of this proceeding. PO Mot. 4. In particular, PersonalWeb argues that the "name" of a particular binary object identifier, as recited in the claims of Woodhill, is not prior art to the '280 patent because there is insufficient written description support in Woodhill's original disclosure for that claimed subject matter. *Id.* at 5. In response, EMC contends that Woodhill's specification provides sufficient written description support for the "name" of a particular binary object identifier, as recited in the claims of Woodhill. Pet. Opp. 6 (Ex. 1005, 7:60-8:65, 18:16-23, fig. 3).

Contrary to PersonalWeb's argument, Woodhill's original disclosure contains sufficient written description support for the "name" of a particular binary object identifier, as recited in the claims of Woodhill. Upon reviewing the description of Binary Object Identification record 58 in Woodhill's original disclosure, the only part of the record that identifies uniquely the binary object associated therewith is Binary Object Identifier 74. Ex. 2007, 26, 33-34.² During Woodhill's self-auditing procedure, Distributed Storage Manager program 24 uses Binary Object Identifier 74 to access a randomly selected binary object by retrieving its corresponding Binary Object Identification record 58 in File Database 25. *See* Ex. 2007, 53. Dr. Clark confirms such an operation was routine because it was old and well-known to access records stored in a database using their identifiers. *See* Ex. 1078 ¶ 10, 11.

Based on the cited portions in Woodhill's original disclosure, as well as Dr. Clark's corroborating testimony, we are persuaded that Woodhill's original disclosure conveys with reasonable clarity to one with ordinary skill in the art that Binary Object Identifier 74 may be considered a "name" for a binary object associated therewith because it uniquely identifies that binary object. *See Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (The written description test is whether the original disclosure of the application relied upon reasonably conveys to a

² Exhibit 2007 includes excerpts from the file history of Woodhill. PersonalWeb did not provide any page numbers for this Exhibit. For purposes of this decision, page 1 is the page that includes "Exhibit PersonalWeb 2007" in the lower, right-hand corner. The remaining pages are numbered consecutively therefrom.

person of ordinary skill in the art that the inventor had possession of the claimed subject matter as of the filing date.)

Accordingly, we are not persuaded that PersonalWeb has presented a sufficient basis to exclude paragraphs 7 and 13 of Dr. Clark's rebuttal declaration that rely upon, and cite to, the "name" of a particular binary object identifier, as recited in the claims of Woodhill.

F. EMC's Motion to Exclude

EMC seeks to exclude three license agreements (Exs. 2010-12), as well as the two declarations offered by Mr. Kevin Bermeister relating to those license agreements (Exs. 2009, 2014), because they are irrelevant under FRE 401, highly prejudicial, confusing, and misleading under FRE 403. Paper 66. PersonalWeb opposes EMC's motion to exclude. Paper 70. In response, EMC filed a reply to PersonalWeb's opposition to its motion to exclude. Paper 72.

The current situation does not require us to assess the merits of EMC's motion to exclude. As discussed above, even without excluding the three license agreements (Exs. 2010-12) and the two declarations offered by Mr. Bermeister (Exs. 2009, 2014), we have concluded that EMC has demonstrated by a preponderance of the evidence that the challenged claims are unpatentable. Accordingly, EMC's motion to exclude evidence is dismissed as moot.

III. CONCLUSION

EMC has demonstrated by a preponderance of the evidence that independent claims 36 and 38 of the '280 patent are unpatentable based on the grounds of unpatentability set forth in the table below.

Claims	Basis	Reference
36 and 38	§ 102(e)	Woodhill
36 and 38	§ 103(a)	Woodhill

IV. ORDER

In consideration of the foregoing, it is

ORDERED that, based on a preponderance of the evidence,

independent claims 36 and 38 of the '280 patent are unpatentable;

FURTHER ORDERED that PersonalWeb's motion to exclude evidence is DENIED;

FURTHER ORDERED that EMC's motion to exclude evidence is DISMISSED as moot; and

FURTHER ORDERED that, because this is a final written decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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