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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PIRAGASH VELUMMYLUM,
JOHANNA S. OLSON, KORWIN J. SMITH,
JAMES H. WOOD, CHRISTOPHER G. EMERY, and
WENLIN MA

Appeal 2015-004330
Application 13/161,099
Technology Center 2400

Before MICHAEL J. STRAUSS, DANIEL N. FISHMAN, and
JON M. JURGOVAN, *Administrative Patent Judges*.

STRAUSS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a Final Rejection of claims 1–15 and 23–29. Claims 16–22 are canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

THE INVENTION

The claims are directed to local networked storage linked to remote networked storage system. Claim 1, reproduced below, is representative of the claimed subject matter:

1. A non-transitory computer-readable medium embodying a program executable in a client computing device, the program comprising:

code that determines whether a local networked storage system is accessible to the client computing device through a local network, the local networked storage system comprising a network-attached storage device;

code that renders a user interface configured to facilitate storage of a file in a remote networked storage system;

code that obtains an indication of the file to be stored from a user through the user interface, the file being stored in the client computing device;

code that sends the file to the local networked storage system over the local network to the network-attached storage device for storage by the local networked storage system when the local networked storage system is determined to be accessible to the client computing device through the local network;

code that sends the file to the remote networked storage system over a remote network for storage by the remote networked storage system in a metadata-based file system managed by a user account when the local networked storage system is determined not to be accessible to the client computing device through the local network; and

wherein the local networked storage system is configured to replicate the file to the remote networked storage system

managed by the user account over the remote network in response to the file being stored by the local networked storage system.

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

McIntyre	US 6,959,122 B2	Oct. 25, 2005
Lamkin	US 2006/0159109 A1	July 20, 2006
Rao	US 7,197,632 B2	Mar. 27, 2007
Akutsu	US 7,739,540 B2	June 15, 2010

REJECTIONS

The Examiner made the following rejections:

Claims 1–5, 10–15, 23, and 26–29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lamkin, Akutsu, and McIntyre. Final Act. 4–8.

Claims 6–9, 24, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lamkin, Akutsu, McIntyre, and Rao. Final Act. 9–10.

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments the Examiner has erred. We agree with Appellants’ conclusions in connection with the rejection of dependent claim 2. However, in connection with the remaining claims, we disagree with Appellants’ conclusions and we adopt as our own (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 2–10) and (2) the reasons set forth by the Examiner in the Examiner’s Answer in response to Appellants’ Appeal Brief (Ans. 2–8) and concur with the

conclusions reached by the Examiner. We highlight the following for emphasis. We consider Appellants' arguments *seriatim*, as they are presented in the Appeal Brief, pages 4–23.

Independent Claims 1, 5, and 23

In connection with the rejection of claim 1, Appellants contend the prior art fails to teach or suggest the metadata-based file system of claim 1. App. Br. 4–5. In particular, Appellants argue “merely storing metadata related to files [as described by McIntyre] does not show or suggest ‘a *metadata-based file system*,’ much less ‘send[ing] the file . . . over a remote network for storage . . . in a metadata-based file system,’ as recited in claim 1.” Reply Br. 5 (second alteration in original). The Examiner responds by finding “[t]he relational database [of McIntyre] which stores files and metadata related to those files is a ‘metadata-based file system.’” Ans. 2; *see also* Final Act. 6. The Examiner further finds Lamkin’s remote network (140) discloses storing data on a remote sever thereby teaching or suggesting code that sends a file to a remote networked storage system over a remote network for storage by the remote networked storage system as required by claim 1. Final Act. 5. The Examiner relies on Akutsu’s failover backup system for teaching sending a file to the remote networked storage system when the local networked storage system is not accessible. Final Act. 6. The Examiner concludes the combination of Lamkin, Akutsu, and McIntyre teaches or suggests the entirety of the disputed limitation. *Id.*

Appellants’ contention is not persuasive of Examiner error. Appellants’ argument that McIntyre’s storage system is not a metadata-based file system is based on unsupported attorney argument devoid of sufficient evidence or reasoning distinguishing the claimed element over the prior art

other than the differing nomenclature used. For example, Appellants provide no evidence that one skilled in the art would have understood a metadata-based file system necessarily includes features absent from or not obvious in view of McIntyre's storage system. Rather than provide a definition for the disputed term, Appellants' Specification discloses "remote networked storage system 116 may be a metadata-based file system such as that described by U.S. Patent Application No. 13/036,539 entitled 'METADATA-BASED FILE SYSTEM.'" Spec. ¶ 15. Likewise, the '539 application also fails to provide a formal definition, instead disclosing "[a] metadata service may be used to associate metadata with the files, thereby facilitating searches of the files using the metadata. By storing files in such a metadata-based file system, users may access the files from any computing device that has network connectivity." US 13/036,539, Spec. ¶ 9. Such a non-limiting example describing a broad capability of a metadata-based file system is ineffective in limiting an interpretation of the disputed system so as to distinguish over McIntyre's metadata-based file system. Instead, we agree with the Examiner in finding, under a broad but reasonable interpretation, McIntyre's storage system, which stores "low resolution user image files, related metadata and other information relevant to providing services to the user" (McIntyre col. 8, ll. 3–6), teaches or suggests the disputed a metadata-based file system of claim 1. *See* Final Act. 6.

Appellants' argument alleging deficiencies of McIntyre in teaching other aspects of the disputed "code that sends the file to the remote networked storage system" (App. Br. 4–6) are not persuasive because such argument fails to address the Examiner's findings that the combination of Lamkin and Akutsu, not McIntyre, teaches or suggests these features (Final

Act. 5–6; Ans. 3). One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

Appellants further contend the Examiner erred by finding “‘devices capable of receiving and/or utilizing the type of content’ [as taught by Lamkin] corresponds to ‘determin[ing] whether a local networked storage system is accessible to the client computing device,’ as recited in claim 1.” Reply Br. 6 (second alteration in original). Appellants argue “*Lamkin* merely describes displaying devices that can receive and utilize **the type of content**, but fails to show or suggest whether the devices are ‘determine[d] . . . [to be] accessible to the client computing device through a local network,’ as recited in claim 1.” *Id.* (alteration in original). The Examiner responds by finding Lamkin’s display of a list of devices, with those that typically do not accept and/or cannot use the type of content are grayed out or otherwise indicated, teaches or suggests the disputed step of determining whether a device is accessible. Final Act. 4; Ans. 3–4.

We agree with the Examiner. Appellants provide insufficient evidence or technical reasoning explaining how and why the disputed step of determining device accessibility is to be construed to distinguish over Lamkin’s selection of devices based on device capability to use a particular type of content. That is, a device that is incapable of receiving a type of content at least suggests a device that is not accessible in connection with that type of content. Thus, in the absence of evidence or argument identifying required features of the disputed accessibility determination, under a broad but reasonable interpretation, Lamkin’s identification of

devices based on device capabilities teaches or suggests the argued limitation.

For the reasons discussed *supra*, Appellants' contentions in connection with the rejection of claim 1 are unpersuasive of Examiner error. Because Appellants' contentions in connection with independent claims 5 and 23 (App. Br. 10–16) are substantively similar to those presented and are based on argument made in connection with claim 1,¹ we are likewise unpersuaded of error in the rejection of these claims. Therefore, we sustain the rejection of independent claims 1, 5, and 23 under 35 U.S.C. § 103(a) over Lamkin, Akutsu, and McIntyre together with the rejections of dependent claims 4, 8–15, and 24–29, which are not argued separately.

Claim 2

In connection with the rejection of claim 2, the Examiner finds Lamkin's performance metrics relating to how a user accesses content teaches or suggests the disputed network performance benchmark between the client computing device and the local storage system as required by claim 2. Appellants contend, rather than using a network performance benchmark, Lamkin optimizes storage "based on factors such as age of content, how often content is accessed, priorities of content, personal preferences, usage behavior, performance metrics relating to how a user

¹ Although Appellants nominally include argument contending the specific language recited by independent claims 5 and 23 is not taught or suggested by the prior art, to the extent such argument differs from that argued in connection with claim 1, we find these additional arguments insufficient under 37 C.F.R. § 41.37(c)(1)(iv) ("A statement which merely points out what a claim recites will not be considered an argument for separate patentability of the claim.").

accesses content, and other such factors.” App. Br. 17 (quoting Lamkin ¶ 80).

We agree with Appellants. Appellants’ Specification discloses:

[S]torage management application 166 may engage in some type of discovery to determine whether the local networked storage system 158 is present. Such discovery may include an application on the client 106 to *measure throughput, latency, and/or other network performance benchmark parameters* to determine if connecting to the local networked storage system 158 would provide a performance benefit over connecting to the remote networked storage system 116.

Spec. ¶ 34 (emphasis added).

We agree with Appellants in concluding Lamkin is deficient in rendering claim 2 obvious. In particular, it is not apparent how Lamkin’s metrics relating to how a *user* accesses content have any relation to, or otherwise teach or suggest, a *network* performance benchmark. Therefore, on the record before us, we do not sustain the rejection of claim 2 under 35 U.S.C. § 103(a) over Lamkin, Akutsu, and McIntyre.

Claim 3

In connection with the rejection of claim 3, Appellants contend:

Lamkin discloses a centralized database that tracks the location of local and centralized content and not “a user interface [that] **does not distinguish between files** stored in both the local . . . and remote networked storage system and files stored in the remote networked storage system but not the local networked storage system,” as recited in claim 3.

App. Br. 19 (alteration in original). The Examiner finds, in the absence of any indication to the contrary, Lamkin’s tracking of local and centralized content does not distinguish between files, that is, the centralized database

“track[s] the location of content whether it is local or centralized (remote).”
Final Act. 6–7.

We are not persuaded of Examiner error. Lamkin neither recommends nor requires distinguishing between files based on storage location and/or whether stored only remotely or also locally. Therefore, we agree with the Examiner in finding Lamkin teaches or suggests the disputed limitation of claim 3 and, accordingly, sustain the rejection of claim 3 under 35 U.S.C. § 103(a) over Lamkin, Akutsu, and McIntyre.

Claim 6

In connection with the rejection of claim 6, Appellants contend the rejection is improper because

Rao fails to show or suggest “logic that sends a **first request to read a second file to the local networked storage system** over the local network,” as recited in claim 6. That is, *Rao* describes extracting information from a shared storage system and not a “local networked storage system over the local network,” as recited in claim 6.

App. Br. 21. The Examiner responds by finding “Lamkin [0049] teaches not only network attached storage, but also a client storing content on devices such as ‘storage or other memory (e.g. database, network attached storage, and other such storage) that store content.’” Ans. 7.

Appellants’ argument is unpersuasive because it fails to address the Examiner’s finding that, in the proposed combination, Lamkin, not Rao, teaches or suggests the disputed local networked storage system. Therefore, we sustain the rejection of claim 6 under 35 U.S.C. § 103(a) over Lamkin, Akutsu, McIntyre, and Rao.

Claim 7

In connection with the rejection of claim 7, Appellants contend:

Lamkin fails to show or suggest the cache and buffer management “obtain[ing] the second file from **the remote networked storage system** managed by the user account when the second file is not cached,” as recited in claim 7. That is, *Lamkin* describes cache management in terms of when and how to transfer content and not “from the remote networked storage system managed by the user account when the second file is not cached,” as recited in claim 7.

App. Br. 22 (alteration in original). The Examiner responds “Lamkin [0082] discloses using schedules and user rules to implement transfers of content for storing, recording and/or archiving. The returning of a file to a device from a file cache is archiving the file.” Ans. 7–8.

Appellants’ argument is not persuasive of Examiner error. Under a broad but reasonable interpretation, claim 7 does not require the second file be obtained from the remote networked storage system *only* when the second file is not cached, but at least when the second is not cached. Thus, because *Lamkin* teaches obtaining the second file from the remote networked storage system as required by claim 1, it also teaches or suggests taking such action when the second file (is or) is not cached. Furthermore, we note in passing and without reliance in our decision, obtaining a file from a storage system upon a cache miss (i.e., when the file is not “cached”) is a basic underlying principle of cache management. That is, if valid data is present in cache, then the data is retrieved from cache; otherwise, the data is retrieved from

other storage and either read directly or through the cache. *See, e.g.*, Microsoft Computer Dictionary 81 (5th ed. 2002).²

For the reasons discussed *supra* we find no error in the Examiner's rejection of claim 7 and sustain the rejection of claim 7 under 35 U.S.C. § 103(a) over Lamkin, Akutsu, McIntyre, and Rao together with the rejection of dependent claims 8 and 9, which are not argued separately.

DECISION

The Examiner's decision to reject claim 2 is reversed.

The Examiner's decision to reject claims 1, 3–15, and 23–29 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

² **cache** *n.* A special memory subsystem in which frequently used data values are duplicated for quick access. A memory cache stores the contents of frequently accessed RAM locations and the addresses where these data items are stored. When the processor references an address in memory, the cache checks to see whether it holds that address. If it does hold the address, the data is returned to the processor; if it does not, a regular memory access occurs.