

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARTIN F. ARLITT, JOHN A. DILLEY, RICHARD J. FRIEDRICH,
TAI Y. JIN, and STEPHANE J. PERRET

Appeal No. 2006-2469
Application No. 09/368,635

ON BRIEF

Before THOMAS, KRASS, and BLANKENSHIP, Administrative Patent Judges.
BLANKENSHIP, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-7, which are all the claims in the application.

We affirm-in-part.

BACKGROUND

The invention relates to a data access network system that includes a content server coupled to a plurality of proxy servers, and a system for maintaining content consistency between the content server and the proxy servers. Claim 1, the sole independent claim, is reproduced below.

1. In a data access network system that includes a content server coupled to a plurality of proxy servers via an interconnect network, a system of maintaining content consistency between the content server and proxy servers, comprising:

a subscription manager in the content server for specifying all of the proxy servers that are subscribed to a content file stored in the content server, and

a consistency manager also in the content server for notifying all of so subscribed proxy servers that cache the content file when the content file is updated in the content server to discard the cached content file from those proxy servers.

The examiner relies on the following references:

Aggarwal et al. (Aggarwal)	US 6,012,126	Jan. 4, 2000 (filed Oct. 29, 1996)
Holt, III (Holt)	US 6,324,565 B1	Nov. 27, 2001 (filed Jul. 28, 1997)
Smith et al. (Smith)	US 6,377,991 B1	Apr. 23, 2002 (filed May 29, 1998)

Claims 1-3 and 5-7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Holt and Smith.

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Claim 4 stands rejected under 35 U.S.C. § 103 as being unpatentable over Holt, Smith, and Aggarwal.

We refer to the Final Rejection (mailed Mar. 24, 2004) and the Examiner's Answer (mailed Feb. 7, 2006) for a statement of the examiner's position and to the Brief (filed May 26, 2005) and the Reply Brief (filed Apr. 7, 2006) for appellants' position with respect to the claims which stand rejected.

OPINION

The examiner finds that Holt describes a system for maintaining consistency between a content server and proxy servers substantially within the requirements of instant claim 1. The examiner's rejection acknowledges that Holt does not use terms such as "subscription manager" and "consistency manager," but contends that elements of the content server perform the functions specified by the claim. (Answer at 4-5 and 8-9.)

Holt describes caching software 24 (Fig. 1) on content providing server 14 that may notify all other servers (e.g., utilizing the caching software 26 at intermediate server 12) on which the data has been cached that corresponding data on the content server has been changed or updated. Col. 6, ll. 1-24. The caching software 24 on content providing server 14 will keep track of where it has sent programs or data, notifying caching servers of changes. Col. 7, ll. 37-45.

Appellants submit in response to the rejection:

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According to Holt, a register is retained in the content providing sever [sic; server] of all intermediate servers that have received document programs or data. (See column 4, lines 8-9 and the abstract, lines 12-14.) If changes to the document program or data occur, they are *broadcast* to all the intermediate servers by the content providing server. That is, the content server in Holt notifies *every* server that ever cached data from it. Hence, Holt does not teach or suggest the concept of a proxy server *subscribing to a content file* in the context of the present invention.

(Brief at 11.)

While appellants point out that the content providing server 14 (Fig. 1) of Holt may maintain a register of all systems in order to mirror the database 20, appellants neglect to point out where the reference may disclose that the content server in Holt notifies every server that ever cached data from it. We find that all the systems (proxy servers) that receive updates from database 20 are “subscribed to a content file stored in the content server,” in the terms of instant claim 1. Moreover, the claim does not preclude broadcasting the data to all the systems that are registered for updates, as described by Holt. As noted at page 17, lines 11 through 23 of appellants’ specification, messages are dispatched to “all” of the proxy data service systems specified in the subscription list when the content file is updated or deleted.

The rejection of claim 1 may thus be affirmed on the basis of Holt alone. However, the examiner also offers Smith to show that a list of subscribers was well known in the art. Appellants’ arguments in the briefs seem to contest a rejection based on using Smith’s array of servers in the Holt system, which is not responsive to the rejection that has been applied. We agree with the examiner that maintaining a list of

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servers in the Holt content server for specifying all of the proxy servers that are to receive content file updates would have been obvious in view of the teachings of Smith. We observe, however, that instant claim 1 does not specify that a “list” is maintained. The register described by Holt is sufficient to meet the implicit requirement of “some mechanism for knowing which intermediate servers cached the data,” as the examiner finds at page 5 of the Answer. Notwithstanding that Holt fails to use the terms “subscription manager” and “consistency manager” in describing the invention, we sustain the rejection of claim 1 over Holt, and over Holt and Smith considered together, because we do not find appellants’ arguments in the briefs to be persuasive of error in either aspect of the rejection.

We also sustain the § 103 of dependent claims 5 and 6. Appellants’ arguments in the Brief seem based on the supposed deficiencies in the rejection applied against base claim 1. To the extent that appellants’ remarks may be construed as arguments in support of the further requirements of the dependent claims, we note that the examiner finds (Answer at 11) that the Web servers described by Holt inherently use HTTP protocols within the scope of the claims. Because the examiner’s finding appears to be reasonable, and we have no response to the contrary from appellants, we sustain the rejection.

We further sustain the § 103 of dependent claim 7. The claim requires notifying all of the specified proxy servers to discard the cached content file from the proxy servers when the content file is updated or deleted in the content server “within a

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predetermined time interval.” As the examiner notes (Answer at 11), the notification to the proxy servers in Holt must be within some “predetermined time interval.” Moreover, consistent with the examiner’s position, we agree that it would have been obvious to send the update notice within a predetermined time interval in order to provide timely notice to the proxy servers.

We sustain the rejection of claim 4 under 35 U.S.C. § 103 as being unpatentable over Holt, Smith, and Aggarwal. Even were we to accept all of appellants’ arguments in response to the rejection (Brief at 19-20), we observe that instant claim 4 does not require that anything be cached. As such, appellants’ arguments are not commensurate with the scope of claim 4.

Finally, we do not sustain the rejection of claim 2, nor the rejection of claims 3 and 4 that incorporate the limitations of claim 2, under 35 U.S.C. § 103 as being unpatentable over Holt and Smith (or over Holt, Smith, and Aggarwal with respect to claim 4). As we have noted *supra*, we agree with the examiner that Smith would have suggested using a list for specifying the subscribed proxy servers. However, claim 2 further requires that a subscription list is generated “when the subscription manager is notified by each of the proxy servers that it has cached the content file.” We do not find disclosure or suggestion of the limitation in the references. Further, the examiner has not pointed out disclosure or suggestion of the noted language of claim 2, nor has otherwise provided a satisfactory explanation in support of why the subject matter as a whole of claim 2 would have been obvious at the time of invention.

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CONCLUSION

The rejection of claims 1-7 under 35 U.S.C. § 103 is affirmed with respect to claims 1 and 5-7 but reversed with respect to claims 2-4. The examiner's decision is thus affirmed-in-part.

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

AFFIRMED-IN-PART

JAMES D. THOMAS)
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