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- (71) Applicant: **CIRCADENCE CORPORATION** [US/US];
Suite 101, 4888 Pearl East Circle, Boulder, CO 80301 (US).
- (72) Inventors: **VANGE, Mark**; 2800 1 Adelaide Street East,
Toronto, Ontario M5C 2V9 (CA). **PLUMB, Marc**; 2800-1
Adelaide Street East, Toronto, Ontario M5C 2V9 (CA).
CLEMENTONI, Marco; 2800-1 Adelaide Street East,
Toronto, Ontario M5C 2V9 (CA).
- (74) Agents: **BURTON, Carol, W.** et al.; Hogan and Hartson
LLP, Suite 1500, 1200 17th Street, Denver, CO 80202 (US).
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(54) Title: SYSTEM AND METHOD FOR NETWORK CACHING

(57) Abstract: A system and method for caching network resources in an intermediary server topologically located between a client and a server in a network. The intermediate server preferably caches at both a back-end location and a front-end location. Intermediary server includes a cache and methods for loading content into the cache as according to rules specified by a site owner. Optionally, content can be proactively loaded into the cache to include content not yet requested. In another option, requests can be held at the cache when a prior request for similar content is pending.



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INTERNATIONAL SEARCH REPORT

International Application No

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F17/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DIAS G V ET AL: "A Smart Internet Caching System" PROCEEDINGS ISOC, 24 June 1996 (1996-06-24), XP002086721 abstract page P, last paragraph figure 1 paragraph [04.0] --- -/--	1-7, 9-11, 27-29



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

20 September 2002

Date of mailing of the international search report

23. 1. 03

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Triest, J

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/12320

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ZHIMEI JIANG ET AL: "Prefetching links on the WWW" COMMUNICATIONS, 1997. ICC '97 MONTREAL, TOWARDS THE KNOWLEDGE MILLENNIUM. 1997 IEEE INTERNATIONAL CONFERENCE ON MONTREAL, QUE., CANADA 8-12 JUNE 1997, NEW YORK, NY, USA, IEEE, US, 8 June 1997 (1997-06-08), pages 483-489, XP010227064 ISBN: 0-7803-3925-8 abstract</p> <p>-----</p>	1-7,9-11

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/12320

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 27-29

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/US 01/12320

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-11, 27-29

system and method for caching network resources wherein more than the requested resources are cached

2. Claims: 13, 18-21, 24-26

cache system with interconnected intermediary servers exchanging cache contents

3. Claims: 14-17

method for caching a network data according to attributes of the traffic

4. Claims: 22-23

a system for caching network resources with a resolver mechanism to select intermediary

5. Claim : 12

cache system with intermediary merging current requests with pending requests