



- (51) International Patent Classification:
G06F 15/167 (2006.01) *G06F 17/00* (2006.01)
- (21) International Application Number:
PCT/US2012/038906
- (22) International Filing Date:
21 May 2012 (21.05.2012)
- (25) Filing Language:
English
- (26) Publication Language:
English
- (30) Priority Data:
61/488,699 20 May 2011 (20.05.2011) US
13/253,033 4 October 2011 (04.10.2011) US
- (71) Applicant (for all designated States except US): **CLOUD-FLARE INC.** [US/US]; 665 Third Street, Suite 207, San Francisco, CA 94107 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **JOEL, Christopher Stephen** [US/US]; 665 Third Street, Suite 207, San Francisco, CA 94107 (US). **BENTEROU, Jason Thomas Walter** [US/US]; 665 Third Street, Suite 207, San Francisco, CA 94107 (US). **HOLLOWAY, Lee Hahn** [US/US]; 665 Third Street, Suite 207, San Francisco, CA 94107 (US). **PRINCE, Matthew Browning** [US/US]; 665 Third Street, Suite 207, San Francisco, CA 94107 (US).

PYE, Ian Gerald [US/US]; 665 Third Street, Suite 207, San Francisco, CA 94107 (US).

(74) Agents: **VINCENT, Lester J.** et al.; Blakely, Sokoloff, Taylor & Zafman LLP, 1279 Oakmead Parkway, Sunnyvale, CA 94085-4040 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: IMPROVED LOADING OF WEB RESOURCES

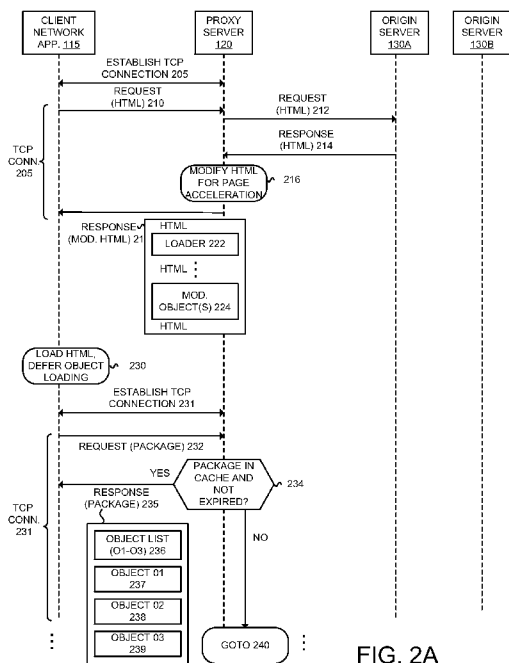


FIG. 2A

(57) Abstract: A method and apparatus for improving loading of web resources. A server receives a request for a Hypertext Markup Language (HTML) document requested by a client network application. The server retrieves the requested document. The server automatically modifies objects referenced in the HTML document that have an external source such that loading of those objects by the client network application will be deferred. The server inserts a client-side script loader or a reference to the client-side script loader into the HTML document. The client-side script loader is configured to, when executed by the client network application, attempt to load the objects that have been deferred. The server transmits the modified HTML document to the client network application.

WO 2012/162275 A3

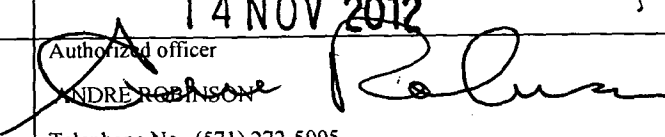


Published:

(88) Date of publication of the international search report:

10 January 2013

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

INTERNATIONAL SEARCH REPORT		International application No. PCT/US12/38906
A. CLASSIFICATION OF SUBJECT MATTER IPC: G06F 15/167(2006.01),17/00(2006.01) USPC: 709/213;715/234 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) U.S. : 709/213; 715/234 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 practicable, search terms used) WEST		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US2009/0089657 A1 (DAVIS) 02 APRIL 2009. SEE ENTIRE DOCUMENT.	1-4, 9-12, 17-20
Y	US 7,689,665 B2 (LIPTON ET AL.) 30 MARCH 2010.. SEE ENTIRE DOCUMENT.	1-4, 9-12, 17-20
A	US3010/0293448 A1 (RAND ET AL.) 18 NOVEMBER 2010. SEE ENTIRE DOCUMENT.	
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent published on or after the international filing date	"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
"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)	"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
"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 12 November 2012 (12.11.2012)		Date of mailing of the international search report 14 NOV 2012
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Authorized officer  ANDRE ROBINSON Telephone No. (571) 272-5005