(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 October 2009 (08.10.2009)

PCT

(10) International Publication Number
WO 2009/124014 A3

(51) International Patent Classification:
G06F 13/00 (2006.01)

(21) International Application Number:
PCT/US2009/038897

(22) International Filing Date:
31 March 2009 (31.03.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/060,015 31 March 2008 (31.03.2008) US

(71) Applicant: **AMAZON TECHNOLOGIES, INC.** [US/US]; PO Box 8102, Reno, NV 89507 (US).

(71) Applicants and
(72) Inventors *(for all designated States except US)*: **RICHARDSON, David, R.** [US/US]; 1200 12th Avenue South, Suite 1200, Seattle, WA 98144 (US). **SCOFIELD, Christopher, L.** [US/US]; 1200 12th Avenue South, Suite 1200, Seattle, WA 98144 (US).

(74) Agent: **AMAZON TECHNOLOGIES, INC.**; 8329 West Sunset Road, Suite 220, Las Vegas, NV 89113 (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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *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))*

(88) Date of publication of the international search report:
23 December 2009

(54) Title: CACHE OPTIMIZATION

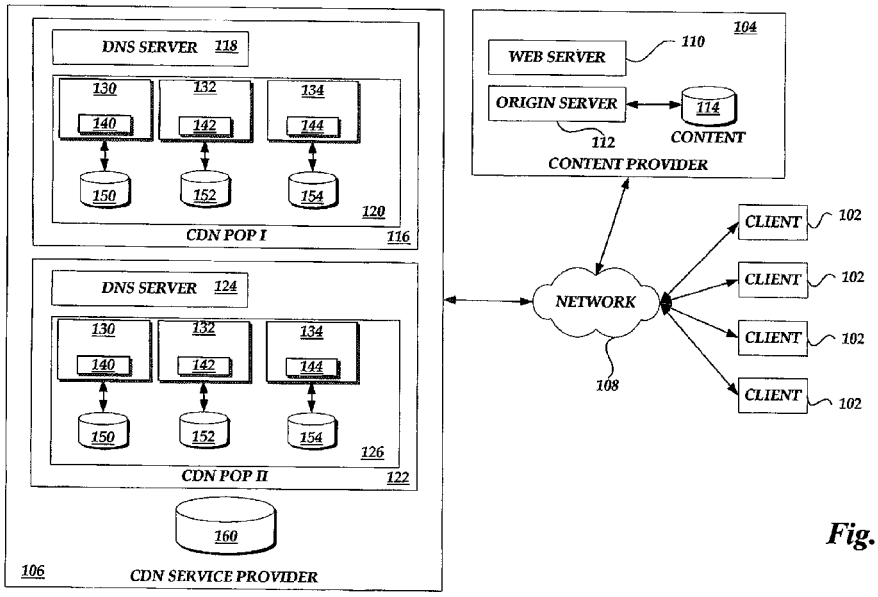

Fig.1.

(57) Abstract: A system and method for management and processing of resource requests at cache server computing devices is provided. Cache server computing devices segment content into an initialization fragment for storage in memory and one or more remaining fragments for storage in a media having higher latency than the memory. Upon receipt of a request for the content, a cache server computing device transmits the initialization fragment from the memory, retrieves the one or more remaining fragments, and transmits the one or more remaining fragments without retaining the one or more remaining fragments in the memory for subsequent processing.

WO 2009/124014 A3