



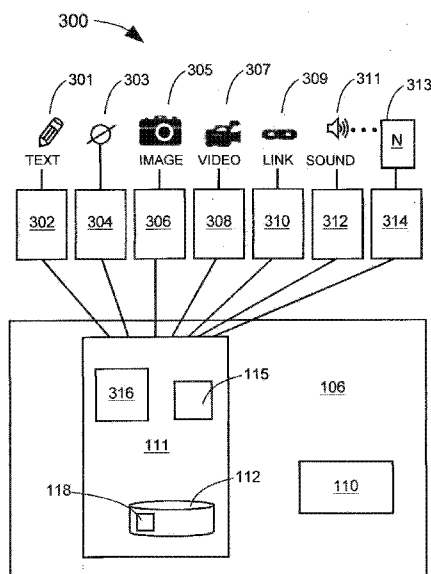
- (51) International Patent Classification:
G06F 17/21 (2006.01) *G06F 17/30* (2006.01)
- (21) International Application Number:
PCT/US2012/036186
- (22) International Filing Date:
2 May 2012 (02.05.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/481,650 2 May 2011 (02.05.2011) US
61/507,546 13 July 2011 (13.07.2011) US
13/461,730 1 May 2012 (01.05.2012) US
- (71) Applicant (for all designated States except US): **ART RE-SEARCH AND TECHNOLOGY, L.L.C.** [US/US]; 2777 E. Camelback Rd, #140, Phoenix, AZ 85016 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **FERNANDO, Barry** [US/US]; 2777 E. Camelback Rd, #140, Phoenix, AZ 85016 (US). **PHELPS, Mark, C.** [US/US]; 2777 E. Camelback Rd, #140, Phoenix, AZ 85016 (US). **HIRSCHFELD, David** [US/US]; 7874 E. Cannon Dr, Scottsdale, AZ 85258 (US).
- (74) Agent: **MOWZON, May, M.**; One Renaissance Square, Two North Central Avenue, Phoenix, AZ 85004-2391 (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).

Published:

— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: ACCESS TO ANNOTATED DIGITAL FILE VIA A NETWORK

FIG. 3

(57) **Abstract:** Apparatuses, systems, and processes provide remote access to virtual objects (202, 204, 206, 208, 210, 212), abstracted from an electronic document. A publisher's electronic document is abstracted into its component virtual objects that are each, in turn, identified. Corresponding computer readable files (302, 304, 306, 308, 310, 312, 314), are formed for respective virtual objects (301, 303, 305, 307, 309, 311, 313), and the computer readable files are indexed. The index (316) is encoded in a non-transitory computer readable medium (111). Users annotate the virtual objects and the annotations (416) are indexed and encoded in the non-transitory computer readable medium. The user annotations are shared among a plurality of users.



— *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:
17 January 2013

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/036186**A. CLASSIFICATION OF SUBJECT MATTER****G06F 17/21(2006.01)i, G06F 17/30(2006.01)i**

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)

G06F 17/21; G06F 15/00; G06F 17/00; G06F 17/30; G06F 15/38; G10L 15/18; G09G 5/00; G06F 7/06

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: electronic document<or> media file, index,

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 05983171A A (YOKOYAMA; YOOICHI et al.) 09 November 1999 See column 3, line 66 - column 4, line 12; column 4, lines 44-62;	1,3-4,7-9,12,14-16 ,19-20
A	column 5, lines 45-56; claim 1, and figures 1,3-4.	2,5-6,10-11,13 ,17-18
Y	US 2007-0136065 A1 (CHI FAI CHIU et al.) 14 June 2007 See paragraph 22 - paragraph 25; paragraph 28 - paragraph 29; figures 3-4.	1,3-4,7-9,12,14-16 ,19-20
A		2,5-6,10-11,13 ,17-18
A	US 2005-0132285 A1 (SUNG-CHIEH CHEN et al.) 16 June 2005 See paragraph 38 - paragraph 39; figures 3-10.	1-20
A	US 2008-0297534 A1 (LIU DAKAI et al.) 04 December 2008 See paragraph 69 - paragraph 70; claim 1, and figure 5.	1-20
A	US 2009-0100035 A1 (CRADICK RYAN KIRK et al.) 16 April 2009 See paragraph 23 - paragraph 28; paragraph 49 - paragraph 52; claim 1, and figures 1,3.	1-20

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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"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

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"&" document member of the same patent family

Date of the actual completion of the international search

22 NOVEMBER 2012 (22.11.2012)

Date of mailing of the international search report

26 NOVEMBER 2012 (26.11.2012)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan
City, 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

PARK, SANG HYUN

Telephone No. 82-42-481-8263



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/036186

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