



- (51) **International Patent Classification:**
G06F 15/16 (2006.01) G06F 9/44 (2006.01)
G06F 13/14 (2006.01)
- (21) **International Application Number:**
PCT/US2010/036961
- (22) **International Filing Date:**
1 June 2010 (01.06.2010)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
12/477,460 3 June 2009 (03.06.2009) US
- (71) **Applicant (for all designated States except US):** MICROSOFT CORPORATION [US/US]; One Microsoft Way, Redmond, Washington 98052-6399 (US).
- (72) **Inventors:** HOWELL, Gareth, A.; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). BROWN, Christopher, J.; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). KAPOOR, Sugandha, S.; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). LANGE, Donovan, P.; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond,

Washington 98052-6399 (US). ZHU, Zhenjun; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) **Title:** UTILIZING SERVER PRE-PROCESSING TO DEPLOY RENDITIONS OF ELECTRONIC DOCUMENTS IN A COMPUTER NETWORK

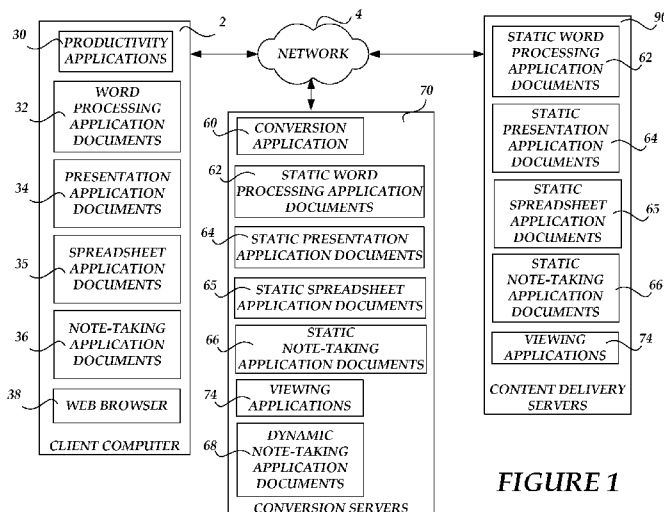


FIGURE 1

(57) **Abstract:** Embodiments are provided for utilizing server pre-processing to deploy static renditions of electronic documents in a computer network. An electronic document may be published from a client computer to a first server computer in the computer network. During publication, the first server computer may create a static rendition of the electronic document and a viewing application for viewing the static rendition of the electronic document on the client computer. The first server computer may store the static rendition of the electronic document and the viewing application on a second server computer for delivery to the client computer. Other embodiments may also include receiving, at the first server computer, a request to make revisions to the electronic document and sending a dynamic version of the electronic document from the first server computer to the client for making the revisions to the electronic document.

WO 2010/141510 A3



— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))* — *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))*

Published:

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

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

3 March 2011

A. CLASSIFICATION OF SUBJECT MATTER*G06F 15/16(2006.01)i, G06F 13/14(2006.01)i, G06F 9/44(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 15/16; G06F 13/38; G06F 15/17; G06F 17/60; G06F 17/30

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, publication

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5870552 A1 (DOZIER; LINDA T. et al.) 09 February 1999 See abstract; column 5, line 26 - column 17, line 67 and figures 3-10d.	1-20
A	US 2002-0128935 A1 (LOCKEY WHITE et al.) 12 September 2002 See abstract; paragraphs [0049]-[0117] and figures 1-27.	1-20
A	US 6144997 A1 (LAMMING; MICHAEL et al.) 07 November 2000 See abstract; column 3, line 36 - column 11, line 30 and figures 1-7.	1-20
A	US 2007-0150463 A1 (CLAUDIO CANNELLA et al.) 28 June 2007 See abstract; paragraphs [0089]-[0201] and figures 1-4b.	1-20

 Further documents are listed in the continuation of Box C. 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

"E" earlier application or patent 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 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

31 DECEMBER 2010 (31.12.2010)

Date of mailing of the international search report

31 DECEMBER 2010 (31.12.2010)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu,
Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

CHOI, Jung Kwon

Telephone No. 82-42-481-8507



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/036961

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5870552 A1	09.02.1999	AU 1996-53538 B2	27.05.1999
		CA 2216826 C	27.01.2009
		CA 2216826-A1	03.10.1996
		EP 0818013 A1	16.05.2001
		JP 03-173660 B2	30.03.2001
		JP 11-503251 A	23.03.1999
		JP 2001-195394 A	19.07.2001
		JP 2004-326819 A	18.11.2004
		JP 2006-309801 A	09.11.2006
		US 2003-0041117 A1	27.02.2003
		US 2007-0168355 A1	19.07.2007
		US 6393469 B1	21.05.2002
		US 7139812 B2	21.11.2006
		WO 96-30846 A1	03.10.1996
US 2002-0128935 A1	12.09.2002	None	
US 6144997 A1	07.11.2000	EP 0691619 A2	10.01.1996
		EP 0691619 A3	04.06.1997
		EP 0691619 B1	07.02.2007
		GB 2296115 A	19.06.1996
		JP 03-672972 B2	20.07.2005
		JP 08-137776 A	31.05.1996
US 2007-0150463 A1	28.06.2007	US 5862321 A1	19.01.1999
		CA 2550516-A1	07.07.2005
		EP 1697860 A1	06.09.2006
		WO 2005-062207 A1	07.07.2005