



- (51) **International Patent Classification:**  
*G06F 17/21* (2006.01)    *G06F 9/44* (2006.01)
- (21) **International Application Number:**  
PCT/US2012/029687
- (22) **International Filing Date:**  
19 March 2012 (19.03.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**  
61/468,473    28 March 2011 (28.03.2011)    US  
13/240,722    22 September 2011 (22.09.2011)    US
- (71) **Applicant (for all designated States except US):** MICROSOFT CORPORATION [US/US]; One Microsoft Way, Redmond, Washington 98052-6399 (US).
- (72) **Inventors:** SUNDERLAND, Mark; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). DAVIS, Tristan; 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, 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, 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, RS, 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))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

**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))

[Continued on next page]

(54) **Title:** TECHNIQUES TO CREATE STRUCTURED DOCUMENT TEMPLATES USING ENHANCED CONTENT CONTROLS

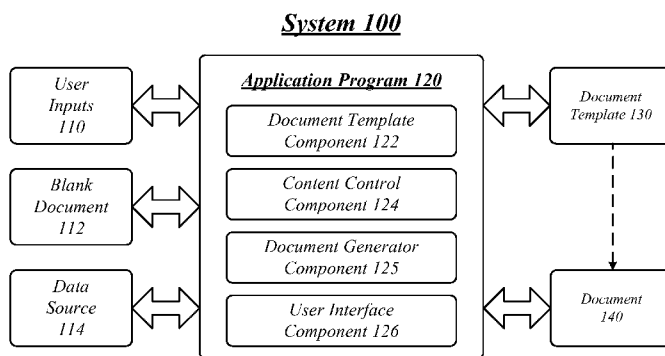


FIG. 1A

(57) **Abstract:** Techniques to create structured documents and document templates using enhanced content controls are described. An apparatus may comprise an application to generate a document from a document template. The application may comprise a document template component operative to retrieve a document template comprising multiple document parts. The application may further comprise a content control component operative to manage a content control embedded in a document part of the document template. The content control may be associated with a data source arranged to store richly formatted content presented by the content control without necessarily requiring the data storage to be written in any particular way. The content control component may synchronize any changes to the formatted content between the content control and the data store. Other embodiments are described and claimed.

WO 2012/134868 A3

**(88)** Date of publication of the international search report:  
27 December 2012

## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2012/029687****A. CLASSIFICATION OF SUBJECT MATTER****G06F 17/21(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 17/21; G06F 17/00; G06F 7/00; G06F 13/00

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) &amp; Keywords:document template, content, control, formatted, synchronize, modify

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0245235 A1 (SURVARNA SINGH et al.) 18 October 2007 See paragraph 18 - paragraph 20; claim 1, figures 5-10.	1-10
A	US 2008-0313532 A1 (DAMES DWAYNE et al.) 18 December 2008 See paragraph 14; paragraph 34 - paragraph 40; paragraph 52; figure 2.	1-10
A	US 2009-0006936 A1 (PARKER JARED et al.) 01 January 2009 See paragraph 34 - paragraph 39; paragraph 45 - paragraph 59; figures 2A-2C.	1-10
A	US 6917969 B2 (RADHIKA AGGARWAL et al.) 12 July 2005 See column 4, line 18 - column 5, line 54; and figure 1.	1-10

 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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

19 OCTOBER 2012 (19.10.2012)

Date of mailing of the international search report

**23 OCTOBER 2012 (23.10.2012)**

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/US2012/029687**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007-0245235 A1	18.10.2007	None	
US 2008-0313532 A1	18.12.2008	JP 2002-351735 A US 2002-129067 A1 US 7546527 B2 US 8055999 B2	06.12.2002 12.09.2002 09.06.2009 08.11.2011
US 2009-0006936 A1	01.01.2009	TW 200907711 A US 7933952 B2 WO 2009-005943 A2 WO 2009-005943 A3	16.02.2009 26.04.2011 08.01.2009 05.03.2009
US 6917969 B2	12.07.2005	US 2004-205566 A1	14.10.2004