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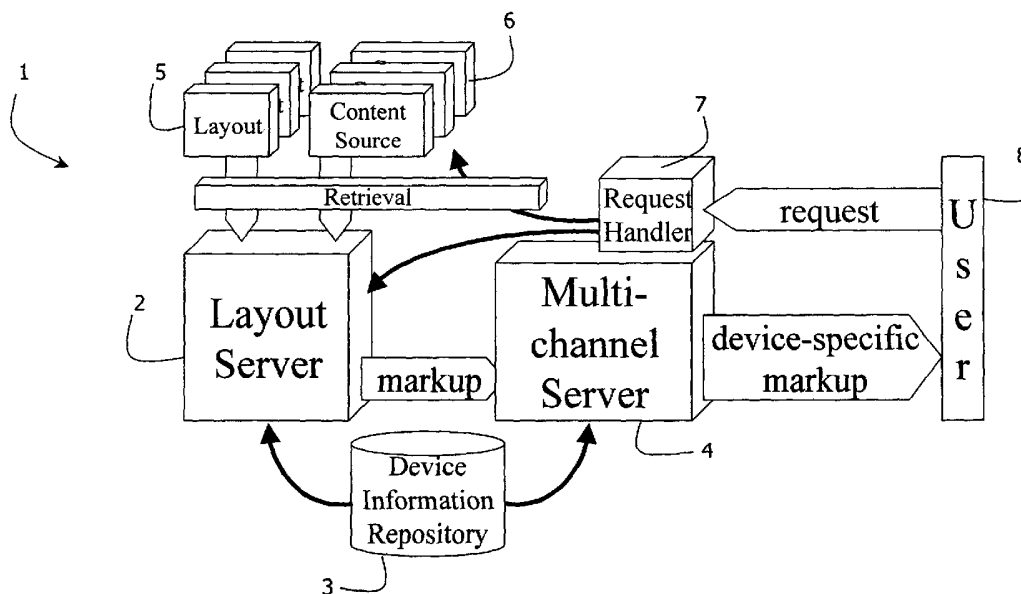
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(54) Title: DOCUMENT TRANSFORMATION



(57) Abstract: A document transformation system (1) comprises a layout server (2) which dynamically generates output documents for delivery to a user device. The layout server (2) selects a layout template (5) according to user device and delivery channel characteristics and fragments from source documents (6) are inserted into the layout templates (5). Information to assist with selection of a template (5) is retrieved from a user device information repository (3).



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IE 03/00018

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F17/30

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)

IPC 7 G06F

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 practical, search terms used)

EPO-Internal, IBM-TDB, INSPEC, COMPENDEX, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 987 480 A (LEUNG PATRICK ET AL) 16 November 1999 (1999-11-16) figures 1,2,5 column 5, line 1 - line 22 ---	1-15
X	MAC PHERSON S: "JavaServer Pages : A Developer's Perspective" INTERNET, 'Online! April 2000 (2000-04), pages 1-5, XP002254374 Retrieved from the Internet: <URL:http://developer.java.sun.com/develop er/technicalArticles/Programming/jsp/> 'retrieved on 2003-09-10! page 4 --- -/--	1-15



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>APACHEWEEK: "Using Server Side Includes" INTERNET, 'Online! 9 August 1996 (1996-08-09), pages 1-2, XP002254375 Retrieved from the Internet: <URL:http://www.apacheweek.com/features/ss i> 'retrieved on 2003-09-10! page 2</p>	1-6,8, 13,15
X	<p>DUMBILL E: "XML at Jetspeed" INTERNET, 'Online! 15 May 2000 (2000-05-15), pages 1-5, XP002245407 Retrieved from the Internet: <URL:http://www.xml.com/pub/a/2000/05/15/j etspeed/index.html> 'retrieved on 2003-06-25! figure 1 page 2, line 1 - line 5 page 3, line 45 -page 4, line 20 page 5, line 28 - line 30</p>	1-6,8, 13,15
A	<p>KRISTENSEN A: "Template resolution in XML/HTML" COMPUTER NETWORKS AND ISDN SYSTEMS, NORTH HOLLAND PUBLISHING. AMSTERDAM, NL, vol. 30, no. 1-7, 1 April 1998 (1998-04-01), pages 239-249, XP004121423 ISSN: 0169-7552 figure 2 page 241, left-hand column page 246</p>	1-15
A	<p>EP 0 889 421 A (YAHOO INC) 7 January 1999 (1999-01-07) figures 2,3</p>	1-15
A	<p>CHALLENGER J ET AL: "A publishing system for efficiently creating dynamic Web content" INFOCOM 2000. NINETEENTH ANNUAL JOINT CONFERENCE OF THE IEEE COMPUTER AND COMMUNICATIONS SOCIETIES. PROCEEDINGS. IEEE TEL AVIV, ISRAEL 26-30 MARCH 2000, PISCATAWAY, NJ, USA, IEEE, US, 26 March 2000 (2000-03-26), pages 844-853, XP010376174 ISBN: 0-7803-5880-5 abstract; figures 4,7</p>	1-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5987480	A	16-11-1999	NONE	
EP 0889421	A	07-01-1999	US 5983227 A	09-11-1999
			AU 738648 B2	20-09-2001
			AU 6991598 A	17-12-1998
			EP 0889421 A1	07-01-1999
			NZ 330448 A	28-01-2000
			WO 9857276 A1	17-12-1998