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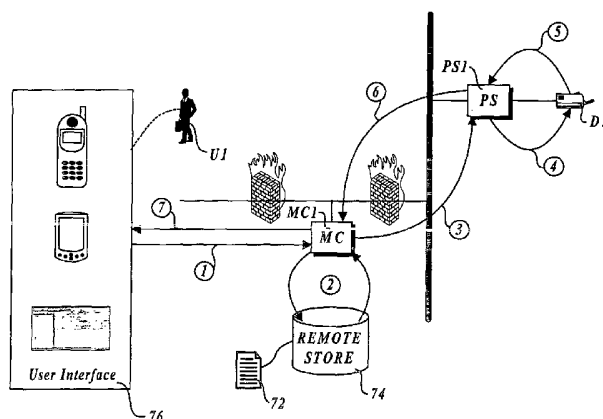
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[Continued on next page]

(54) Title: OUTPUT MANAGEMENT SYSTEM AND METHOD FOR ENABLING PRINTING VIA WIRELESS DEVICES



(57) Abstract: A system and method for managing output such as printing, faxing, and e-mail over various types of computer networks. In one aspect, the method provides for printing via a wireless device. The system provides rendereable data to the wireless device by which a user-interface (UI) (76) may be rendered. The UI enables users (u1) to select source data and an output device on which the source data are to be printed. The source data are then retrieved from a local or remote store (74) and forward to a print service, which renders output image data corresponding to the source data and the output device that was selected. The output image data are then submitted to the output device to be physically rendered. The user-interfaces enable wire and wireless devices to access the system. The system enables documents (72) to be printed by reference, and enables access to resources behind firewalls.



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/26783

A. CLASSIFICATION OF SUBJECT MATTER												
IPC(7) : G06F 15/16 US CL : 345/2.3; 379/88.13; 713/201; 709/311												
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) U.S. : 345/2.3; 379/88.13; 713/201; 709/311												
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) STN/PCTFULL DATABASE, DIALOG, EAST AND ACM LIBRARY												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
Y	FLYNN, et. al. The Satchel System Architecture: mobile access to document services, December 2000, ISSN: 1383-469X, pages 243-258. Relevant passages: Introduction on page 243, section 2.2 on page 244, sections 3-4 on pages 244-246, sections 4.1-4.2 on pages 246-247, section 6 on page 248, sections 7.2-7.5 on page 249, section 7.8-7-10 on pages 250-251, section 9 on pages 252-253, section 11.2 on page 255.	1-20										
Y	VARSHNEY et. al. Emerging mobile and wireless networks, June 2000, ISSN: 0001-0782, pages 73-81. Relevant passages: Wireless LAN standard section on page 75-76, Wireless Application Protocol section on pages 78-78.	1-20										
Y	US 6,255,800 A (BORK) July 3 2001, abstract, column 3, lines 9-23, 35-45, column 5, lines 41-47, 52-60, column 6, lines 4-7, and 14-45, column 7, lines 5-13.	21-57										
Y	WO 01/42894 A1 (LARSON et. al.) June 14 2001, page 1, lines 23-26, page 2, lines 16-29, page 4, lines 20-35, page 5, lines 1-3, 20-26, page 6, lines 9-12, 16-36, page 7, lines 11-29, page 8, lines 8-27, page 9, lines 1-13, and 23-27, page 10 lines 14-30, page 11, lines 1-5, page 12, line 24-page 14, line 4, page 15, lines 3-11, 22-26, and 29-34, page 16, lines 4-27, page 17, lines 11-31, page 18, lines 15-34, page 20, line 25-page 21, line 34, page 23, lines 1-6, page 26, lines 9-25.	21-57										
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
* Special categories of cited documents: <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"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</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"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</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"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</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"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	"E" earlier application or patent published on or after the international filing date	"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	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
"A" document defining the general state of the art which is not considered to be of particular relevance	"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											
"E" earlier application or patent published on or after the international filing date	"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											
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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											
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family											
"P" document published prior to the international filing date but later than the priority date claimed												
Date of the actual completion of the international search 30 September 2002 (30.09.2002)		Date of mailing of the international search report 10 FEB 2003										
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230		Authorized officer MARK POWELL <i>Peggy Hanod</i> Telephone No. (703) 305-9703										

INTERNATIONAL SEARCH REPORT

PCT/US02/26783

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,088,796 A (CIANFROCCA et. al.) 11 July 2000, column 2, line 11-column 3, line 40, column 8, line 40-column 9, line 35, column 12, line 47-column 13, line 50.	58-72
Y	Flynn, et. al. The Satchel System Architecture: document services, December 2000, ISSN: 1383-469X, pages 243-258. Relevant passages: Introduction on page 243, section 2.2 on page 244, sections 3-4 on pages 244-246, sections 4.1-4.2 on pages 246-247, section 6 on page 248, sections 7.2-7.5 on page 249, section 7.8-7-10 on pages 250-251, section 9 on pages 252-253, section 11.2 on page 255.	58-72
Y	US 5,825,891 A (LEVESQUE et. al.) 20 October 1998, abstract, Figs. 1, 3, 8, and column 1, lines 43-55, column 2, lines 4-14, column 4, line 47-column 5, line 22, column 6, lines 16-37.	58-72

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/26783

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claim Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.