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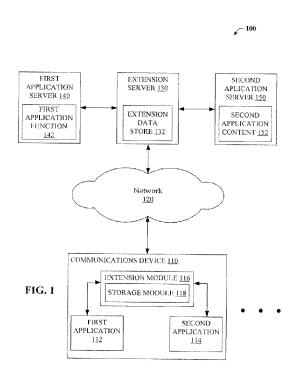
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[Continued on next page]

### (54) Title: METHODS AND APPARATUS FOR FACILITATING APPLICATION INTER-COMMUNICATIONS



(57) Abstract: A method and apparatus for facilitating communication amongst a plurality of applications associated with at least one device is provided. The method may comprise receiving, by an extension module, a request from a first application to communicate with one or more applications, establishing a communication link between the first and at least one of the one or more applications, wherein the communication link allows the first and the at least one of the one or more applications to communicate at least one of data or control information, and storing, by the extension module, at least a portion of data communicated between the communicating applications.



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EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, Published: 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))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

- 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))

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

29 September 2011

### INTERNATIONAL SEARCH REPORT

International application No PCT/US2010/044302

A. CLASSIFICATION OF SUBJECT MATTER INV. G06F9/46 H04L29/08 ADD.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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 H04L

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, WPI Data, PAJ, INSPEC, COMPENDEX

Category*	Citation of document, with indication, where appropriate, of the	e relevant passages	Relevant to claim No.
X	US 2005/177702 A1 (CHICHKOV IV AL) 11 August 2005 (2005-08-11	AN [FI] ET )	1,4,5,7, 10-24, 27,28, 30,33-43
Υ	the whole document		2,3,6,8, 9,25,26, 29,31,32
Υ	WO 2005/115036 A1 (KYOCERA WIR [US]; DATE UMESH M [US]; PATEL [US]; RAJ) 1 December 2005 (20	MEHUL B	2,3,6,8, 9,25,26, 29,31,32
Α	the whole document	<b>-</b> ,	1,4,5,7, 10-24, 27,28, 30,33-43
		-/	
X Furti	her documents are listed in the continuation of Box C.	X See patent family annex.	
"A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document 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 another 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	Date of mailing of the international sea	rch report
1	8 July 2011	29/07/2011	
Name and r	mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040,	Authorized officer  Beltrán-Escavy, J	

International application No. PCT/US2010/044302

# **INTERNATIONAL SEARCH REPORT**

This informational search report has not been established in respect of certain plains under Article 17(2)(a) for the following reasons:  1. Claims Nos.:	Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
because they relate to subject matter not required to be searched by this Authority, namely:  2.	This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
because they relate to parts of the international application that do not comply with the presented requirements to such an extent that no meaningful international search can be carried out, specifically:  3.	
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  This International Searching Authority found multiple inventions in this international application, as follows:  see additional sheet  1. X 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 fees, this Authority did not invite payment of additional fees.  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, this international search report covers only those claims for which fees were paid, specifically claims Nos.:  Remark on Protest  The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.	because they relate to parts of the international application that do not comply with the prescribed requirements to such
This International Searching Authority found multiple inventions in this international application, as follows:  see additional sheet  1.	
see additional sheet  1.	Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
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 fees, this Authority did not invite payment of additional fees.  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	This International Searching Authority found multiple inventions in this international application, as follows:
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.  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 and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.	see additional sheet
additional fees.  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 and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.	1. X As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
only those claims for which fees were paid, specifically claims Nos.:  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 and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.	2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
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 and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.	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.:
payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.	
	payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

# FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-43

Method for facilitating communications between 2 or more applications.

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2. claims: 44-72

Method for providing content to a plurality of devices.

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# INTERNATIONAL SEARCH REPORT

International application No
PCT/US2010/044302

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Relevant to claim No.	
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2010/044302

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