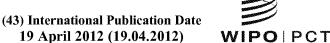
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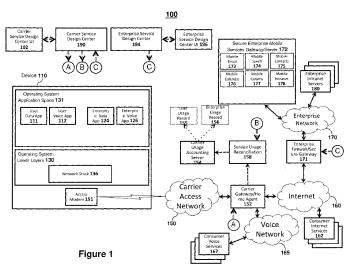
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Published:

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- 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: ENTERPRISE ACCESS CONTROL AND ACCOUNTING ALLOCATION FOR ACCESS NETWORKS



(57) Abstract: Enterprise and consumer billing allocation for wireless communication device service usage activities is provided. In some embodiments, service usage activities includes monitoring a service usage activity of a wireless communication device, and determining an enterprise and consumer billing allocation for the monitored service usage activity. In some embodiments, it includes monitoring a service usage activity of a wireless communication device, and reporting the monitored service usage activity to a network element, in which the network element determines an enterprise and consumer billing allocation for the monitored service usage activity. In some embodiments, it includes providing a service design center for configuring an enterprise and consumer billing allocation of monitored service usage activities for a plurality of wireless communication devices associated with an enterprise account, and implementing the configured enterprise and consumer billing allocation for monitored service usage activities for the plurality of wireless communication devices associated with the enterprise account.





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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - H04M 11/00 (2012.01) USPC - 455/405							
According to	o International Patent Classification (IPC) or to both na	ational classification and IPC					
B. FIELDS SEARCHED							
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 455/403-408; 705/1.1, 400, 412 (keyword limited - see search terms below)							
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST (PGPB, USPT, USOC, EPAB, JPAB); GOOGLE; Google Scholar Terms: wireless, network, billing, monitor, usage, allocate, message, notification, trigger, provision, policy, service, cost, dynamic, credential, enterprise, classify, categorize, access.							
C. DOCUI	MENTS CONSIDERED TO BE RELEVANT						
Category*	Citation of document, with indication, where ap	Relevant to claim No.					
Υ	US 2003/0224781 A1 (Milford et al.) 04 December 20 entire document, especially abstract, para [0002], [000 [0058], [0059], [0065], [0075], [0076], [0083], [0084], [0122], [0123].	1-22, 24-25					
Y	US 2003/0046396 A1 (Richter et al.) 06 March 2003 (entire document, especially abstract, para [0008], [000 [0334], [0368], [0515].	1-22, 24-25					
A	US 2010/0192170 A1 (Raleigh) 29 July 2010 (29.07.2010), entire document, especially abstract, para [0075], [0081], [0084], [0086], [0109],						
	·						
Further documents are listed in the continuation of Box C.							
* Special categories of cited documents: "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 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 		"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					
"O" docume means	reason (as specified) ent referring to an oral disclosure, use, exhibition or other	"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					
	ent published prior to the international filing date but later than rity date claimed	"&" document member of the same patent f	amily				
Date of the actual completion of the international search 23 May 2012 (23.05.2012)		30 MAY 2012					
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INTERNATIONAL SEARCH REPORT

PCT/US2011/053797-30,05.2012

International application No.

PCT/US 11/53797 Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet) This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Claims 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: Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). 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: Group 1: Claims 1-22 and 24-25 directed to a network system containing information about a network access activity of an end-user device and a first service design center for monitoring/controlling the service usage across multiple networks. Group 2: Claim 23 directed to a communications device that supports secure execution of an enterprise software application in a secure enterprise application execution environment and a personal application execution environment comprising memory to support execution of personal software applications not approved by the enterprise to execute in the secure enterprise application execution environment and accounted to a personal service usage allocation. The inventions listed as Groups 1 - 2 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features. The only common technical feature shared by the above groups is a communications/end-user device that can operate across multiple networks. The common technical feature does not represent an improvement over the prior art of US 2011/0201304 A1 to Sutaria et al. that teaches a communications/end-user device that can operate in multiple networks (para [0056]-[0060]). As the above technical feature of communications/end-user device that can operate in multiple networks as taught by Sutaria et al was known, this cannot be considered a special technical feature that would otherwise unify the groups. Therefore, the inventions of Groups 1-2 lack unity of invention under PCT Rule 13 because they do not share a same or corresponding special technical feature. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees. 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.: 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.: Claims 1-22 and 24-25 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.

No protest accompanied the payment of additional search fees.