



— *the filing date of the international application is within two months from the date of expiration of the priority period (Rule 26bis.3)*

(88) Date of publication of the international search report:
26 July 2012

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H04M 11/00 (2012.01)

USPC - 455/405

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)

USPC: 455/405

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. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/0224781 A1 (Milford et al.) 04 December 2003 (04.12.2003), entire document, especially abstract, para [0002], [0009], [0013], [0014], [0035], [0040], [0051], [0058], [0059], [0065], [0075], [0076], [0083], [0084], [0086], [0103], [0104], [0114], [0115], [0122], [0123].	1-22, 24-25
Y	US 2003/0046396 A1 (Richter et al.) 06 March 2003 (06.03.2003), entire document, especially abstract, para [0008], [0009], [0010], [0020], [0023], [0081], [0122], [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].	1-22, 24-25

☐ 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

"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 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

23 May 2012 (23.05.2012)

Date of mailing of the international search report

30 MAY 2012

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
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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:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ 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:
3. ☐ 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.

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 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.:
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.