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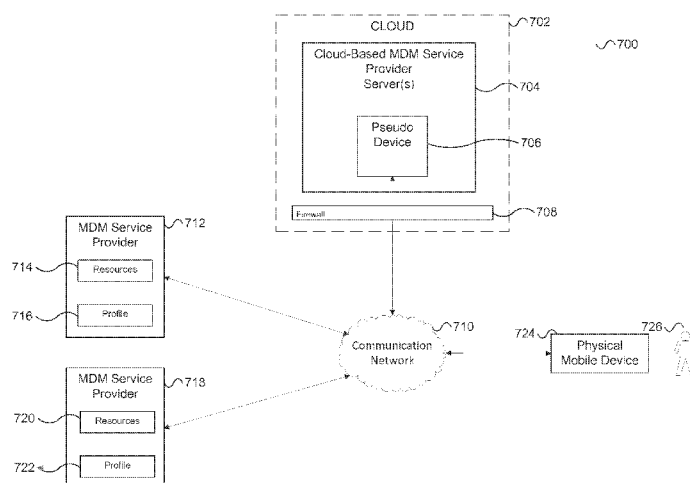
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- with international search report (Art. 21(3))
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(88) Date of publication of the international search report:
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(54) Title: PROVIDING MOBILE DEVICE MANAGEMENT FUNCTIONALITIES



(57) Abstract: Methods, systems, computer-readable media, and apparatuses for providing mobile device management (MDM) functionalities are presented. In some embodiments, a pseudo device representative of a physical end user device may be established within a cloud computing environment. The pseudo device may be provisioned for use with MDM service providers and configured to receive commands from the MDM service providers on behalf of the physical end user device. In some embodiments, multiple pseudo devices each representative of a physical end user device may be established within a cloud computing environment. A first pseudo device may be provisioned for use with a first MDM service provider and configured to receive commands from the first MDM service provider on behalf of the physical end user device. A second pseudo device may be provisioned for use with a second MDM service provider and configured to receive commands from the second MDM service provider.



INTERNATIONAL SEARCH REPORT

International application No

PCT/US2013/078457

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F9/50
ADD.

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

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 practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KEUNWOO RHEE ET AL: "High-Level Design for a Secure Mobile Device Management System", 21 July 2013 (2013-07-21), HUMAN ASPECTS OF INFORMATION SECURITY, PRIVACY, AND TRUST, SPRINGER BERLIN HEIDELBERG, BERLIN, HEIDELBERG, PAGE(S) 348 - 356, XP047034175, ISBN: 978-3-642-39344-0 page 349, line 10 - page 350, line 18; figure 1 ----- -/--	1,2,12, 13,17,18



Further documents are listed in the continuation of Box C.



See patent family annex.

* 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

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INTERNATIONAL SEARCH REPORT

International application No
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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	LEUNG ET AL: "A mobile device management framework for secure service delivery", INFORMATION SECURITY TECHNICAL REPORT, ELSEVIER ADVANCED TECHNOLOGY, AMSTERDAM, NL, vol. 13, no. 3, 1 August 2008 (2008-08-01), pages 118-126, XP025658702, ISSN: 1363-4127, DOI: 10.1016/J.ISTR.2008.09.003 [retrieved on 2008-10-10] page 120, left-hand column, line 25 - page 121, left-hand column, line 11 -----	1,2,12, 13,17,18
A	Citrix: "Enterprise MDM Feature Brief", Citrix documentation on line, 1 August 2012 (2012-08-01), pages 1-8, XP055098727, Retrieved from the Internet: URL:http://www.citrix.com/content/dam/citrix/en_us/documents/products-solutions/enterprise-mdm-feature-brief.pdf [retrieved on 2014-01-27] the whole document -----	1,2,12, 13,17,18

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/078457

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:

see additional 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.:

1, 2, 12, 13, 17, 18

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.

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, 2, 12, 13, 17, 18

receiving a first command and sending a second command to the physical end user device

2. claims: 3, 14, 19

sending enrollment requests and receiving policy-enforcement profiles

3. claims: 4, 5, 15, 20

sending a response without sending commands to the physical end user device

4. claim: 6

receiving a first command during from a time period in which a different policy-enforcement profile is active

5. claims: 7, 16

caching resource data

6. claim: 8

producing and sending a modified command

7. claim: 9

sending a selective wipe command

8. claims: 10, 11

receiving an indication of no longer being within a geographic fence and retracting a policy enforcement profile

9. claim: 21

establishing a second pseudo device representative of a second physical end user device
