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(81) Designated States (unless otherwise indicated, for every kind of national protection available):

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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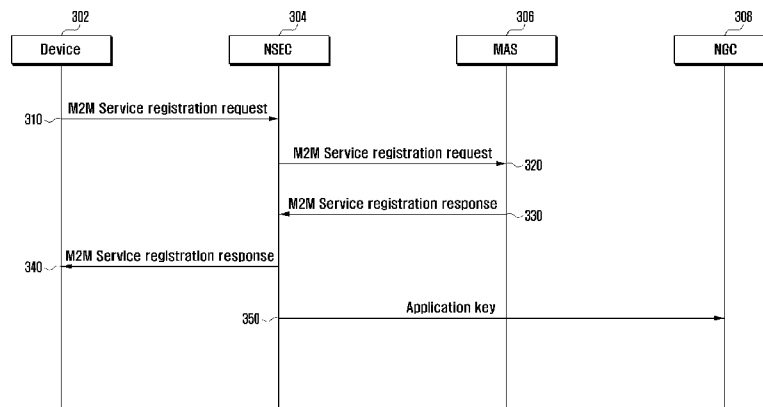
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(54) Title: METHOD AND APPARATUS FOR PROVIDING MACHINE-TO-MACHINE SERVICE

[Fig. 3]



(57) Abstract: A method and an apparatus for providing Machine-to-Machine (M2M) service are provided. A method of providing service by an M2M device includes transmitting a request for service to a Network Security Capability (NSEC), the request for service comprising an identifier of a Device Service Capability Layer (DSCL) of the M2M device, performing an Extensible Authentication Protocol (EAP) authentication with an M2M Authentication Server (MAS) via the NSEC, and generating, if the EAP authentication is successful, a service key using a Master Session Key (MSK), a first constant string, and the identifier of the DSCL.

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A. CLASSIFICATION OF SUBJECT MATTER***H04W 12/06(2009.01)i, H04W 12/04(2009.01)i, H04W 88/02(2009.01)i***

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)

H04W 12/06; G06F 15/173; G06Q 30/00; H04L 29/06

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: M2M|MTC, EAP, registration

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2011-0016321 A1 (SUNDARAM GANAPATHY S. et al.) 20 January 2011 See claims 1-37 and figures 1-7.	1-14
A	US 2010-0057485 A1 (LUFT ACHIM) 04 March 2010 See claims 1-41 and figures 1-7.	1-14
A	3GPP_TS_22.368(V10.2.0) Service requirements for Machine-Type Communications (MTC); Stage 1 (Release 10), 30 September 2010 See paragraphs 7.2.1 - 7.2.6.	1-14

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2011-0016321 A1	20.01.2011	WO 2011-008498 A2 WO 2011-008498 A3	20.01.2011 07.04.2011
US 2010-0057485 A1	04.03.2010	None	