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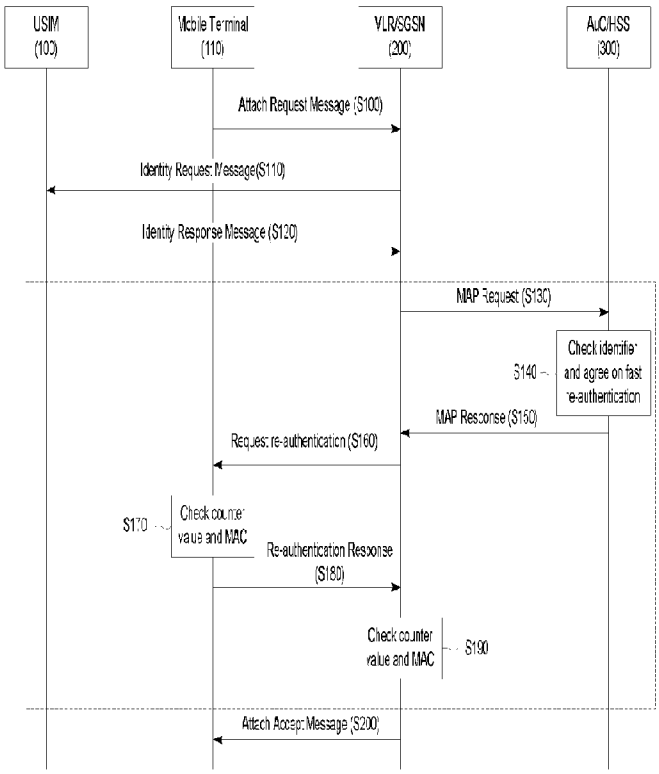
(54) Title: FAST RE-AUTHENTICATION METHOD IN UMTS

[Fig. 9]



(57) Abstract: The present invention relates to a fast re-authentication method in a UMTS (universal mobile telecommunications system) during handover between a WLAN (wireless local area network) and the UMTS. A fast re-authentication message is added to a PMM (packet mobility management) protocol, which is a packet mobility management protocol, in the UMTS, which is a 3G mobile communication system, and a re-authentication identifier is added to the existing authentication and encryption message, which makes it possible to perform a fast re-authentication process on a mobile terminal subscriber when handover occurs between a WLAN system and the UMTS and the inside of the UMTS. Therefore, it is possible to reduce a handover delay to the minimum by supporting fast re-authentication that is capable of reducing delay due to an algorithm process for authentication and the generation of authentication vectors and keys during the handover between the UMTS and the WLAN access system.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC[8]: H04Q, 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 practicable, search terms used)
WPI, EPODOC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KWON, H. et al. 'Consideration of UMTS-WLAN Seamless Handover.' In: IEEE International Symposium on Multimedia, ISM'05, New York: IEEE, 12 December 2005 (12.12.2005), XP010870597, ISBN 0-7695-2489-3 *sections 2-6.* --	1-12
A	US 2005/251681 A1 (ROBLES, L.R. et al.) 10 November 2005 (10.11.2005) *abstract, figs. 1-7; paragraphs [0150]-[0163], [0176]-[0189].* --	1-12
A	US 2005/233729 A1 (STOJANOVSKI, S. et al.) 20 October 2005 (20.10.2005) *abstract, figs. 1-4; paragraphs [0058]-[0088].* --	1-12

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

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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.
A	WO 2005/027559 A1 (DOCOMO COMMUNICATIONS LABORATORIES EUROPE GMBH) 24 March 2005 (24.03.2005) *abstract, fig. 7;* *page 7, lines 16-30; page 19, line 19 - page 21, line 15.* --	1-12
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X,P	KWON, H. et al. 'UMTS-WLAN Interworking Strategies for Reducing Handover Delays.' In: IEEE Vehicular Technology Conference, VTC-2006 Fall, New York: IEEE, 1 September 2006 (01.09.2006), XP031051549, ISBN 1-4244-0063-5 *sections II, III.* ----	1-12

INTERNATIONAL SEARCH REPORT

Information on patent family members

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