



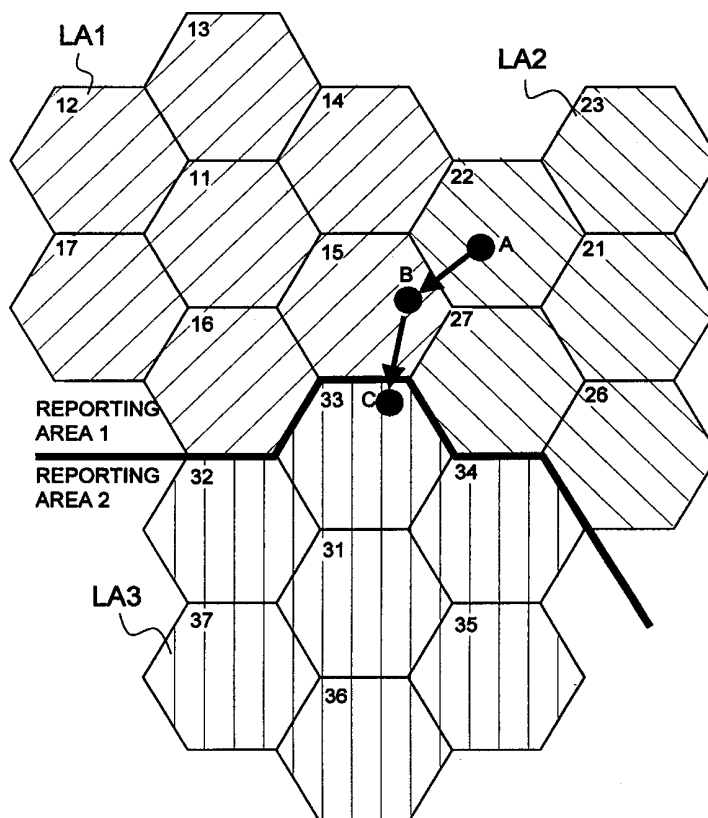
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁶ : H04Q 7/38</p>	<p>A3</p>	<p>(11) International Publication Number: WO 99/31917</p> <p>(43) International Publication Date: 24 June 1999 (24.06.99)</p>
<p>(21) International Application Number: PCT/FI98/00971</p> <p>(22) International Filing Date: 11 December 1998 (11.12.98)</p> <p>(30) Priority Data: 974502 12 December 1997 (12.12.97) FI</p> <p>(71) Applicant (for all designated States except US): NOKIA TELECOMMUNICATIONS OY [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): HAUMONT, Serge [FR/FI]; Tehtaankatu 6 B 14, FIN-00140 Helsinki (FI). LINDHOLM, Heikki [FI/FI]; Peräsin 3 D 2, FIN-02320 Espoo (FI). SÖDERBACKA, Lauri [FI/FI]; Aarnivalkeantie 5 B 26, FIN-02100 Espoo (FI). BÄCK, Juha [FI/FI]; Kulosaaren Puistotie 44 B 22, FIN-00570 Helsinki (FI). NIEMI, Juhapekka [FI/FI]; Tahmelanvaltatie 33 as 5, FIN-33250 Tampere (FI). KESKINEN, Matti [FI/FI]; Retiisikuja 4, FIN-04400 Järvenpää (FI). HARTIKAINEN, Jari [FI/FI]; Metsärinne 7B, FIN-04220 Kerava (FI).</p> <p>(74) Agent: PATENT AGENCY COMPATENT LTD.; Teollisuuskatu 33, P.O. Box 156, FIN-00511 Helsinki (FI).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p> <p>(88) Date of publication of the international search report: 19 August 1999 (19.08.99)</p>

(54) Title: LOCATION MANAGEMENT IN A MOBILE TELECOMMUNICATION SYSTEM

(57) Abstract

The basic idea of the invention is to separate the location area used in the RAN and the reporting area used when reporting the location of the mobile to the core network. The size of the location area is selected preferably in the RAN based on the services used by the subscriber to optimize the use of radio resources. A reporting area comprises one or a plurality of location areas. The size of a reporting area is selected based on the accuracy of location information needed in the core network. The RAN informs the core network when a subscriber moves out of his current location area. The core network and the radio access network negotiate the size of the reporting area prior to the activation of the service. Additionally, the reporting areas can be renegotiated when the service is in the active state.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 98/00971

A. CLASSIFICATION OF SUBJECT MATTER		
IPC6: H04Q 7/38 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
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IPC6: H04Q		
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EPODOC, WPI, PAT, TXTE		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
LPX	WO 9837721 A2 (NOKIA TELECOMMUNICATIONS OY), 27 August 1998 (27.08.98), page 3, column 23 - line 25; page 4, line 30 - page 5, line 5; page 7, line 8 - line 28, claims 7-8, 14-15, page 10, line 19 - line 28; page 13, line 28 - line 34	1,19,21,23, 25
P,A	--	2-18,20,22, 24
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Date of the actual completion of the international search		Date of mailing of the international search report
10 June 1999		15 -06- 1999
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86		Authorized officer Per Källquist/cs Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

International application No.

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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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