

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
25 July 2002 (25.07.2002)

PCT

(10) International Publication Number
WO 02/058356 A3

(51) International Patent Classification⁷: H04L 29/08, 12/58, H04Q 7/22

(21) International Application Number: PCT/SE02/00021

(22) International Filing Date: 8 January 2002 (08.01.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/262,040 18 January 2001 (18.01.2001) US
10/024,304 21 December 2001 (21.12.2001) US

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, 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, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

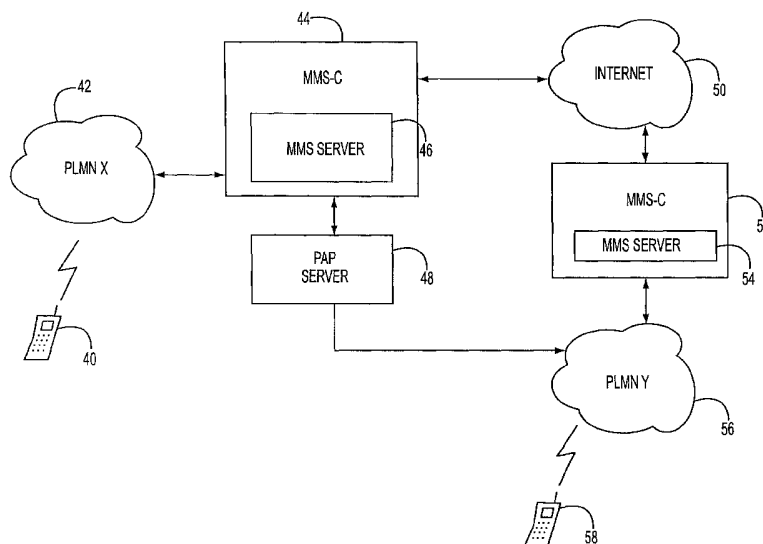
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

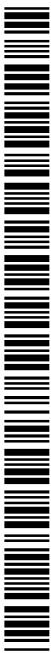
(88) Date of publication of the international search report:
7 November 2002

[Continued on next page]

(54) Title: MULTIMEDIA MESSAGING SERVICE ROUTING SYSTEM AND METHOD



(57) Abstract: A multimedia messaging system for sending and receiving multimedia MMS messages. The MMS messages are sent to a MMS server and addressed to the recipient's MSISDN number. MMS server sends a notification to a PAP server that sends the notification as a WAP Push to the recipient mobile device telling the mobile device to retrieve the message. If the recipient mobile device is engaged in an on going or dedicated session with the Internet, the notification is sent to the recipient mobile device during the session. The recipient mobile device then initiates a HTTP GET request to retrieve the multimedia message via the voice or data channel of a PLMN. If the recipient mobile device is not engaged in an on going or dedicated session with the Internet, the notification is sent to the recipient mobile device as a WAP Push using SMS as bearer via the signaling channel of the PLMN. The recipient mobile device then initiates a HTTP GET request to retrieve the multimedia message via the voice or data channel of the PLMN.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/SE 02/00021

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04L29/08 H04L12/58 H04Q7/22

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)

IPC 7 H04L H04Q H04M

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 practical, 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	"MULTIMEDIA MESSAGING SERVICE (MMS)" 3G TS 23140 V1.0.0., 3GPP, December 1999 (1999-12), pages 1-27, XP002902593 cited in the application SECTIONS 5.1, 6.2-6.5, 8.1-8.5.3.	1-40
X	WO 99 66746 A (NOKIA TELECOMMUNICATIONS OY) 23 December 1999 (1999-12-23) page 8, line 8 - line 24 page 14, line 34 -page 17, line 33 abstract; claims 10-23	1-7, 11-17, 20-27, 30-37
A	---	8-10,18, 19,28, 29,38-40
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

8 August 2002

Date of mailing of the international search report

26. 08. 2002

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INTERNATIONAL SEARCH REPORT

 In International Application No
 PCT/SE 02/00021

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 99 61966 A (NOKIA MOBILE PHONES LTD) 2 December 1999 (1999-12-02) page 12 abstract; claims 1-13 ---	1-40
A	WO 00 57610 A (NOKIA MOBILE PHONES LTD) 28 September 2000 (2000-09-28) page 4, line 5 - line 15 abstract; claims 1-7 ---	1-40
P,X	US 2001/053687 A1 (SIVULA TIMO) 20 December 2001 (2001-12-20) the whole document ---	1-40
P,X	WO 01 33781 A (NOKIA MOBILE PHONES LTD) 10 May 2001 (2001-05-10) abstract; claims 16-52 -----	1-40

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/SE 02/00021

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9966746	A	23-12-1999	FI 981387 A	16-12-1999
			AU 4784699 A	05-01-2000
			BR 9911243 A	06-03-2001
			CN 1304620 T	18-07-2001
			EP 1088461 A2	04-04-2001
			WO 9966746 A2	23-12-1999
			JP 2002518957 T	25-06-2002

WO 9961966	A	02-12-1999	FI 981184 A	28-11-1999
			AU 4268399 A	13-12-1999
			EP 1082648 A2	14-03-2001
			WO 9961966 A2	02-12-1999

WO 0057610	A	28-09-2000	FI 990640 A	23-09-2000
			AU 2237400 A	28-09-2000
			AU 3450000 A	09-10-2000
			BR 0009181 A	02-01-2002
			CA 2301419 A1	22-09-2000
			CN 1272737 A	08-11-2000
			EP 1163775 A2	19-12-2001
			WO 0057610 A2	28-09-2000
			JP 2000324174 A	24-11-2000

US 2001053687	A1	20-12-2001	FI 20001437 A	17-12-2001

WO 0133781	A	10-05-2001	FI 992401 A	06-05-2001
			AU 1398501 A	14-05-2001
			AU 1399001 A	14-05-2001
			EP 1228610 A1	07-08-2002
			WO 0133781 A1	10-05-2001
			WO 0133782 A1	10-05-2001
