

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
20 August 2009 (20.08.2009)

PCT

(10) International Publication Number  
WO 2009/100979 A3

(51) International Patent Classification:  
H04W 88/18 (2009.01)

(21) International Application Number:  
PCT/EP2009/050844

(22) International Filing Date:  
26 January 2009 (26.01.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
08425081.0 11 February 2008 (11.02.2008) EP

(71) Applicant: NOKIA SIEMENS NETWORKS OY  
[FI/FI]; Karaportti 3, FI-02610 Espoo (FI).

(72) Inventor: PAROLARI, Sergio; Via Canaletto 14,  
I-20133 Milano (IT).

(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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:  
29 April 2010

(54) Title: METHOD AND APPARATUSES FOR CODEC CHANGE FOR ONGOING CALLS ON IP-BASED A INTER-FACE1

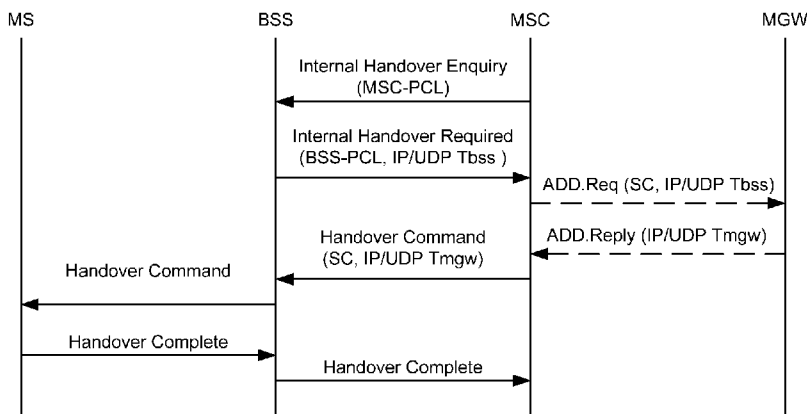


Figure 1: Codec change triggered by the Core Network

(57) Abstract: A method to perform codec changes for ongoing calls on an IP- based A interface between a base station subsystem and a mobile switching center, where the transcoding functionality is removed from the base station subsystem, the method being based on a handover procedure, and where a preparation and an execution phase are controlled via signalling messages between the base station subsystem and the mobile switching center.

WO 2009/100979 A3

**INTERNATIONAL SEARCH REPORT**

International application No

PCT/EP2009/050844

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. H04W88/18

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

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	"Draft CR to TR 43.903-003: Input to chapter 5.2.3, G2-080090" 3RD GENERATION PARTNERSHIP PROJECT, [Online] 17 January 2008 (2008-01-17), pages 1-4, XP002567875 Retrieved from the Internet: URL:http://www.3gpp.org/ftp/tsg_geran/Wg2_Protocol_Aspects/GERAN2_36bis_Ljubljana/Docs/G2-080090.zip> paragraph [5.2.3.]	1-8

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 document 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

10 February 2010

Date of mailing of the international search report

23/02/2010

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040,  
 Fax: (+31-70) 340-3016

Authorized officer

Günther, Steffen

## INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2009/050844

## C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	<p>"3rd Generation Partnership Project; Technical Specification Group GERAN; A-interface over IP Study (AINTIP); (Release 8)"</p> <p>3GPP DRAFT; GP-080414 TR 43903-100 WITH ESSENTIAL REVISION MARKS AGAINST -004, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, 22 February 2008 (2008-02-22), pages 1-59, XP050019725 [retrieved on 2008-02-22] paragraph [3.4.] paragraphs [7.1.3.] - [7.1.4.]</p>	1-8
A	<p>"Draft CR to TR 43.903-003: Input to Deployment Scenarios: Clean version, G2-080093"</p> <p>3RD GENERATION PARTNERSHIP PROJECT, [Online] 17 January 2008 (2008-01-17), pages 1-9, XP002567876 Retrieved from the Internet: URL: <a href="http://www.3gpp.org/ftp/tsg_geran/Wg2_Protocol_Aspects/GERAN2_36bis_Ljubljana/Docs/G2-080093.zip">http://www.3gpp.org/ftp/tsg_geran/Wg2_Protocol_Aspects/GERAN2_36bis_Ljubljana/Docs/G2-080093.zip</a> paragraph [5.2.4.]</p>	1-8
A	<p>"3rd Generation Partnership Project; Technical Specification Group GERAN; A-interface over IP Study (AINTIP); (Release 8)"</p> <p>3GPP DRAFT; PROPOSED CLEANUP OF TR 43.903 UP TO CHAPTER 6.4, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, 16 November 2007 (2007-11-16), pages 1-54, XP050019350 [retrieved on 2007-11-16] paragraphs [7.1.1.4.2.] - [7.4.1.1.]</p>	1-8