

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 June 2007 (21.06.2007)

PCT

(10) International Publication Number
WO 2007/070860 A3

- (51) International Patent Classification:
H04B 1/38 (2006.01)
- (21) International Application Number:
PCT/US2006/062120
- (22) International Filing Date:
14 December 2006 (14.12.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
11/300,522 14 December 2005 (14.12.2005) US
- (71) Applicant (for all designated States except US): **CORE MOBILITY, INC.** [US/US]; 1280 Villa Street, Mountain View, CA 94041 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **OTHMER, Konstantin** [US/US]; 550 Oak Street, Mountain View, CA 94041 (US). **RUF, Michael, P.** [US/US]; 7420 Dover Lane, Parkland, FL 33067 (US).
- (74) Agents: **DODD, Michael, B.** et al.; WORKMAN NY-DEGGER, 1000 Eagle Gate Tower, 60 East South Temple, Salt Lake City, UT 84111 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, 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, LV, LY, MA, MD, 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, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, 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, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

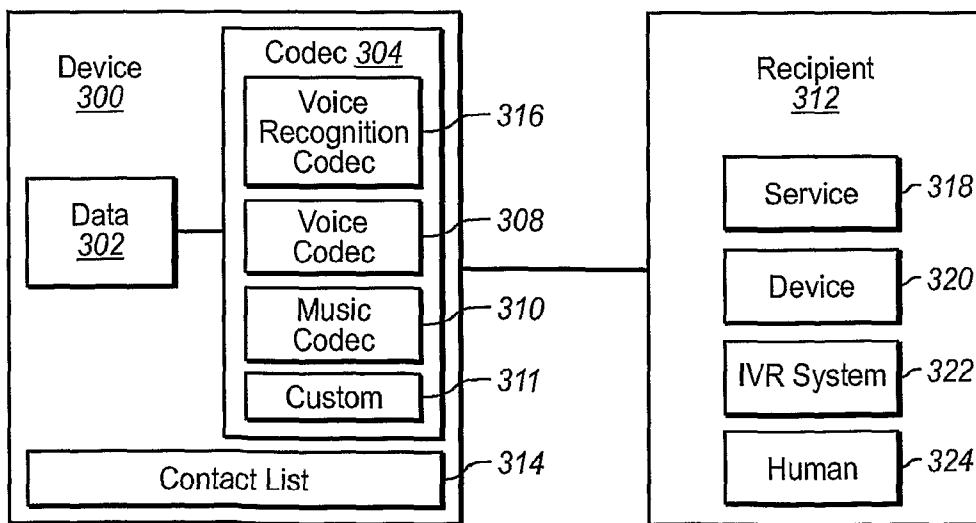
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

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

[Continued on next page]

(54) Title: INTELLIGENT CODEC SELECTION TO OPTIMIZE AUDIO TRANSMISSION IN WIRELESS COMMUNICATIONS



(57) Abstract: An optimal compressor/decompressor (codec) module is intelligently selected for use when transmitting audio from a mobile communication device to a recipient. The codec can be selected based on the type of the audio data or the characteristics of the recipient. The codec can also be selected based on whether the audio data is to be transmitted to the recipient in real time or recorded and transmitted asynchronously. Audio data that is to be transmitted to the recipient is encoded or compressed using the selected codec and then sent to the recipient. Selection of the codec in this manner permits the compression to be optimized in response to specific circumstances associated with the communication of the audio data between the sender device and the recipient. The codec can be selected during the communication in response to a tone or other data provided by the recipient.

WO 2007/070860 A3



(88) Date of publication of the international search report:

17 January 2008

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 06/62120

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H04B 1/38 (2007.01)

USPC - 455/563

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)

USPC: 455/563

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

USPC: 704/201, 370/395.61

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

PubWEST(PGPB,USPT,USOC,EPAB,JPAB), GOOGLE SCHOLAR

terms: wireless, audio or voice or music, select, codec, compress, speech recognition, recipient, tone, IVR, VOIP, ITU V.70.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	US 5,855,003 A (LADDEN et al.) 29 December 1998 (29.12.1998), entire document.	1-3, 5, 7-9, 12 and 25-27 ----- 4, 6, 10-11, 13-24 and 28 -29
Y	ITU-T Recommendation V.70 [online]. TELECOMMUNICATION STANDARDIZATION SECTOR OF INTERNATIONAL TELECOMMUNICATION UNION, 08/1996 [retrieved on 2007-10-18]. Retrieved from internet: <URL:http://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-V.70-199608-!!!PDF-E&type=items>. entire document.	4, 13-24 and 28-29
Y	US 2004/0022237 A1 (ELLIOTT et al.) 05 February 2004 (05.02.2004), [0038]-[0039] and [0451]-[0453].	6
Y	US 2002/0046315 A1 (MILLER et al.) 18 April 2002 (18.04.2002), [0024]-[0026], [0054]-[0055] and [0064]-[0066].	10-11

 Further documents are listed in the continuation of Box C.

* 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 application or patent 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

19 October 2007 (19.10.2007)

Date of mailing of the international search report

20 NOV 2007

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents

P.O. Box 1450, Alexandria, Virginia 22313-1450

Facsimile No. 571-273-3201

Authorized officer:

Lee W. Young

PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774