

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 November 2006 (23.11.2006)

PCT

(10) International Publication Number
WO 2006/123208 A3

- (51) **International Patent Classification:**
H04N 5/44 (2006.01) *H04N 7/24* (2006.01)
- (21) **International Application Number:**
PCT/IB2006/000988
- (22) **International Filing Date:** 7 April 2006 (07.04.2006)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
11/132,296 19 May 2005 (19.05.2005) US
- (71) **Applicant (for all designated States except US):** **NOKIA CORPORATION** [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).
- (71) **Applicant (for LC only):** **NOKIA, INC.** [US/US]; 6000 Connection Drive, Irving, TX 75039 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **VÄRE, Jani** [FI/FI]; Valotie 7, FIN-20780 Kaarina (FI). **VIRTANEN,**

Kari [FI/FI]; Rajatie 20 A, FIN-21160 Merimasku (FI). **KALLIO, Jamo** [FI/FI]; Kanslerintie 1 as 37, FIN-20200 Turku (FI). **HAMARA, Arto** [FI/FI]; Yo-kyla 84A 17, FIN-20540 Turku (FI).

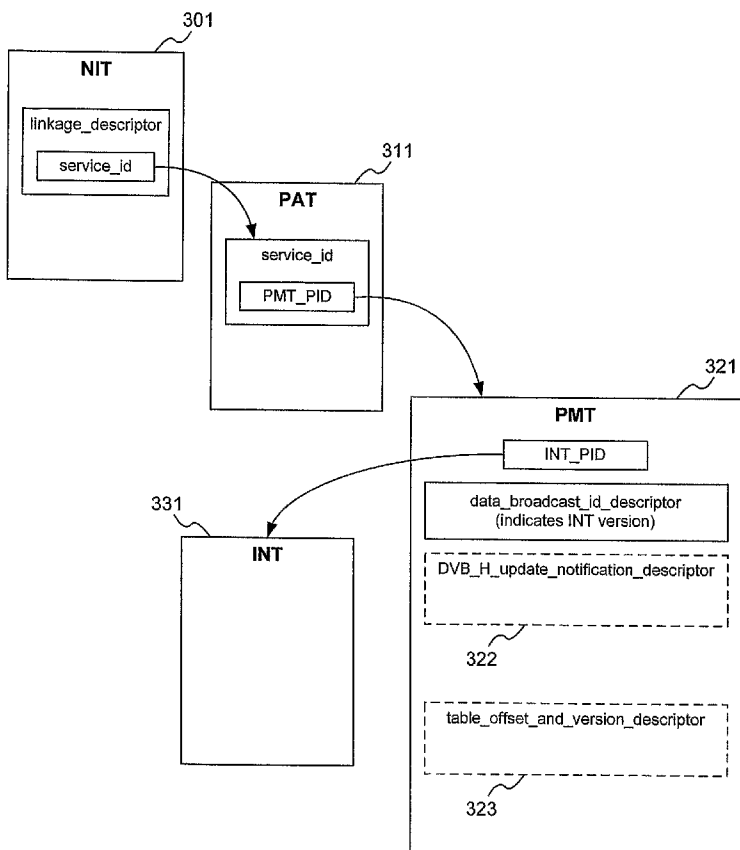
(74) **Agent:** **WRIGHT, Bradley, C.**; Banner & Witcoff, Ltd., 1001 G Street, N.W., Eleventh Floor, Washington, DC 20001-4597 (US).

(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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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,

[Continued on next page]

(54) **Title:** METHODS AND APPARATUS FOR SIGNALING OFFSETS AND CHANGES IN DIGITAL BROADCAST NETWORKS



(57) **Abstract:** Systems and methods are provided for receivers of digital broadband broadcast signals to determine a time of delivery and a version of a particular signaling table. The receiver is able to determine whether an update of the signaling table is needed based on factors such as whether the update applies (e.g., a DVB-H specific change for a mobile terminal in a DVB-H network). The receiver may power down while awaiting delivery of the signaling table (or utilize the radio for other purposes), powering back up in time to receive the signaling table.

WO 2006/123208 A3



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).

Published:

— *with international search report*

(88) Date of publication of the international search report:
15 March 2007

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/IB2006/000988

A. CLASSIFICATION OF SUBJECT MATTER

IPC: see extra sheet

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: H04N

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

SE,DK,FI,NO classes as above

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

EPO-INTERNAL, WPI DATA, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2004066652 A1 (NOKIA CORPORATION), 5 August 2004 (05.08.2004), figure 6, claims 1, 19-24, abstract	1-29
Y	EP 1475969 A1 (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.), 10 November 2004 (10.11.2004), [0035]-[0037],[0039],[0051]	1-29
A	US 20020198905 A1 (ALI TABATABAI ET AL), 26 December 2002 (26.12.2002), [0011],[0054]	1-29
A	US 20040221307 A1 (YUKO ARAI ET AL), 4 November 2004 (04.11.2004), [0245]	1-29

 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 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

29 November 2006

Date of mailing of the international search report

05-12-2006

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

Jesper Bergstrand/MN
Telephone No. +46 8 782 25 00

International patent classification (IPC)**H04N 5/44** (2006.01)**H04N 7/24** (2006.01)**Download your patent documents at www.prv.se**

The cited patent documents can be downloaded at www.prv.se by following the links:

- In English/Searches and advisory services/Cited documents (service in English) or
- e-tjänster/anförda dokument (service in Swedish).

Use the application number as username.

The password is **CHZEFCEHGW**.

Paper copies can be ordered at a cost of 50 SEK per copy from PRV InterPat (telephone number 08-782 28 85).

Cited literature, if any, will be enclosed in paper form.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB2006/000988

WO	2004066652	A1	05/08/2004	AU	2003201443	A	00/00/0000
				BR	0318015	A	29/11/2005
				CA	2513843	A	05/08/2004
				EP	1588574	A	26/10/2005
				JP	2006513651	T	20/04/2006
				US	20060013153	A	19/01/2006

EP	1475969	A1	10/11/2004	JP	2004254130	A	09/09/2004
				US	20050105537	A	19/05/2005

US	20020198905	A1	26/12/2002	NONE			

US	20040221307	A1	04/11/2004	AU	706965	A,B	01/07/1999
				CN	1224972	A	04/08/1999
				CN	1240208	C	01/02/2006
				CN	1561095	A	05/01/2005
				DE	69826612	D,T	09/02/2006
				EP	0921689	A,B	09/06/1999
				EP	1463316	A	29/09/2004
				JP	3447207	B	16/09/2003
				JP	11168666	A	22/06/1999
				TW	420950	B	00/00/0000