



- (51) International Patent Classification:  
*H04W 68/02* (2009.01)
- (21) International Application Number:  
PCT/IB2014/000659
- (22) International Filing Date:  
28 March 2014 (28.03.2014)
- (25) Filing Language:  
English
- (26) Publication Language:  
English
- (30) Priority Data:  
PCT/CN2013/000359 28 March 2013 (28.03.2013) CN
- (71) Applicant: **ORANGE** [FR/FR]; 78, rue Olivier de Serres, F-75015 Paris (FR).
- (72) Inventor: **Yifan, Yu**; 23F, Tower A, Beijing Global Trade Center, 36 North Third Ring Road East, Dongcheng District, Beijing 100013 (CN).
- (74) Agent: **ORANGE/IMT/OLPS/IPL**; Sandrine CODA, 38-40, rue du Général Leclerc, F-92794 Issy Moulineaux Cedex 9 (FR).

- (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, BN, BR, BW, BY, BZ, CA, CH, CL, 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, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: PAGING IN MOBILE NETWORKS USING INDEPENDENT PAGING CELLS AND ACCESS CELLS

(57) Abstract: In a mobile network a mobile device selects a paging cell whose location area is registered to the network and determines where paging of this mobile device takes place, and selects an access cell to be used by the mobile device when connecting to the network. When the mobile device receives a paging message in the paging cell it sends the paging response through the access cell. Nodes in the mobile network are configured not to reject or filter out paging responses received from mobile devices that this node did not page; instead the nodes initiate call setup for such mobile devices.

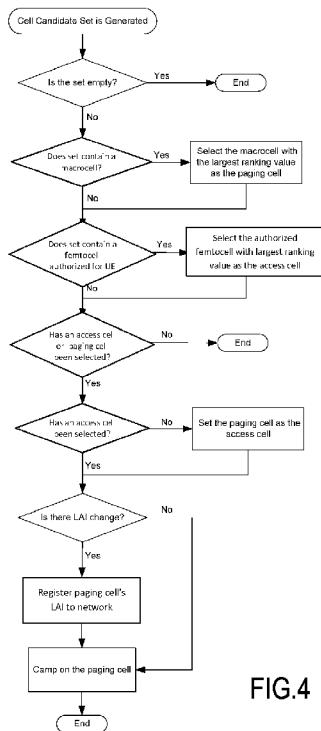


FIG.4

WO 2014/155201 A3

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *of inventorship (Rule 4.17(iv))*

**Published:**

- *with international search report (Art. 21(3))*

**(88) Date of publication of the international search report:**  
5 March 2015

INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2014/000659

A. CLASSIFICATION OF SUBJECT MATTER  
INV. H04W68/02  
ADD.  
  
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 practicable, search terms used)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2009/097015 A1 (QUALCOMM INC [US]; HORN GAVIN B [US]; AGRAWAL AVNEESH [US]; SAMPATH AS) 6 August 2009 (2009-08-06) paragraphs [0008], [0010], [0011] paragraphs [0024], [0025] paragraphs [0031] - [0033] paragraph [0038] paragraph [0044] paragraphs [0050] - [0056] paragraphs [0068], [0069] paragraph [0072] claim 58  -----  -/--	1-15

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  28 November 2014	Date of mailing of the international search report  05/12/2014
---	--

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  Hegeman, Hans
--	---

## INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2014/000659

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/091246 A1 (ERICSSON TELEFON AB L M [SE]; LUNDSJOE JOHAN [SE]; ESPINEIRA RAMON [SE]) 21 October 2004 (2004-10-21) page 3, line 20 - page 4, line 6 page 5, lines 6-14 page 6, line 4 - page 7, line 10 page 8, line 13 - page 9, line 23 page 11, lines 1-21 -----	1,2,5-8, 10-15
X	EP 2 203 021 A1 (IND TECH RES INST [TW]) 30 June 2010 (2010-06-30) paragraphs [0060] - [0081] -----	1,6,8, 10-15
X,P	EP 2 672 768 A2 (ARCADYAN TECHNOLOGY CORP [TW]) 11 December 2013 (2013-12-11) paragraphs [0021] - [0043] -----	1-3,5-15
A	EP 1 531 561 A1 (MATSUSHITA ELECTRIC IND CO LTD [JP] PANASONIC CORP [JP]) 18 May 2005 (2005-05-18) paragraph [0008] -----	1-15

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2014/000659

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2009097015	A1	06-08-2009	
		AU 2008349497	A1 06-08-2009
		CA 2713650	A1 06-08-2009
		CN 101981988	A 23-02-2011
		EP 2241148	A1 20-10-2010
		JP 5356412	B2 04-12-2013
		JP 2011514038	A 28-04-2011
		KR 20100114119	A 22-10-2010
		RU 2010136316	A 20-03-2012
		TW 200934264	A 01-08-2009
		TW 201320788	A 16-05-2013
		US 2009197570	A1 06-08-2009
		WO 2009097015	A1 06-08-2009
-----			
WO 2004091246	A1	21-10-2004	
		AT 352175	T 15-02-2007
		AU 2003224535	A1 01-11-2004
		CN 1765139	A 26-04-2006
		DE 60311326	T2 31-05-2007
		EP 1616446	A1 18-01-2006
		HK 1089038	A1 18-03-2011
		KR 20050122241	A 28-12-2005
		US 2006189331	A1 24-08-2006
		WO 2004091246	A1 21-10-2004
-----			
EP 2203021	A1	30-06-2010	
		CN 101765189	A 30-06-2010
		EP 2203021	A1 30-06-2010
		TW 201026133	A 01-07-2010
		US 2010159960	A1 24-06-2010
-----			
EP 2672768	A2	11-12-2013	
		EP 2672768	A2 11-12-2013
		TW 201351939	A 16-12-2013
		US 2013331111	A1 12-12-2013
-----			
EP 1531561	A1	18-05-2005	
		CN 1611020	A 27-04-2005
		EP 1531561	A1 18-05-2005
		KR 20040068320	A 30-07-2004
		US 2005221842	A1 06-10-2005
		WO 2004019520	A1 04-03-2004
-----			