

Exhibit “C”



(12) **United States Patent**
Faerber et al.

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 (45) **Date of Patent:** **Oct. 21, 2014**

(54) **METHOD, NETWORK AND DEVICE FOR INFORMATION PROVISION BY USING PAGING AND CELL BROADCAST SERVICES**

(58) **Field of Classification Search**
 USPC 455/419, 404.1, 414.1; 340/539
 See application file for complete search history.

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Martin Oettl, Weilheim (DE)

(56) **References Cited**

(73) Assignee: **Cellular Communications Equipment LLC**, Plano, TX (US)

U.S. PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 297 days.

5,278,539 A * 1/1994 Lauterbach et al. 340/539.18
 5,430,440 A * 7/1995 Shim 340/7.52
 6,161,016 A 12/2000 Yarwood
 6,177,873 B1 1/2001 Cragun
 6,559,753 B1* 5/2003 Uchida 340/7.59
 6,697,651 B2 2/2004 Li

(Continued)

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FOREIGN PATENT DOCUMENTS

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CN 1722804 A 1/2006
 EP 1 501 328 A2 1/2005

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 (2), (4) Date: **Feb. 2, 2010**

(Continued)

OTHER PUBLICATIONS

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(Continued)

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Primary Examiner — Charles Shedrick

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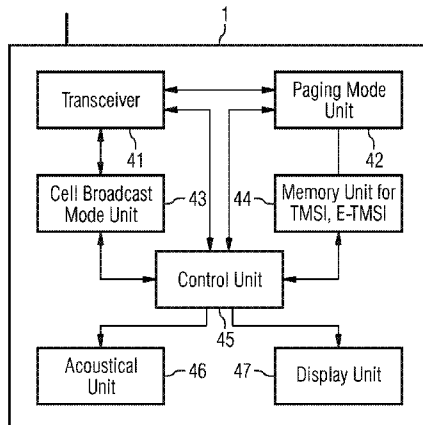
(51) **Int. Cl.**
H04M 3/42 (2006.01)
H04W 76/00 (2009.01)
H04W 68/00 (2009.01)

(57) **ABSTRACT**

(52) **U.S. Cl.**
 CPC **H04W 76/002** (2013.01); **H04W 68/00** (2013.01)
 USPC **455/419**; 455/404.1; 340/539.11; 340/7.59

Informing a number of users about an emergency or other situation of public interest is accomplished using a broadcast service. A specific identifier is used in a paging message for activating broadcast service in terminals. A terminal checks a received paging message with regard to the presence of the specific identifier and when detecting the specific identifier, switches to a broadcast mode for receiving broadcast content. The received broadcast emergency content is notified and/or displayed to the users of the terminals.

17 Claims, 4 Drawing Sheets



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(56)

References Cited

U.S. PATENT DOCUMENTS

7,127,230	B2	10/2006	Aaron	
7,130,610	B2*	10/2006	Dolezal et al.	455/404.1
7,519,351	B2*	4/2009	Malone, III	455/404.1
7,577,971	B2	8/2009	Kim et al.	
8,219,121	B2	7/2012	Sim et al.	
8,260,249	B2	9/2012	Andersen et al.	
2003/0143974	A1*	7/2003	Navarro	455/404
2004/0227618	A1	11/2004	Hwang et al.	
2005/0020260	A1	1/2005	Jeong et al.	
2005/0037728	A1*	2/2005	Binzel et al.	455/404.1
2005/0157669	A1	7/2005	Zhu et al.	
2005/0237183	A1	10/2005	Lamb	
2006/0079200	A1*	4/2006	Hirouchi et al.	455/404.1
2006/0178128	A1*	8/2006	Eaton et al.	455/404.1
2007/0004377	A1*	1/2007	Medford et al.	455/404.1
2008/0194224	A1	8/2008	Thorson et al.	
2008/0227428	A1	9/2008	Rezaiifar et al.	
2009/0233634	A1	9/2009	Aghili et al.	
2009/0239554	A1	9/2009	Sammour et al.	
2009/0251315	A1	10/2009	Lee et al.	
2010/0099439	A1	4/2010	Aghili et al.	
2010/0159870	A1	6/2010	Jokinen	

FOREIGN PATENT DOCUMENTS

EP		1 513 368	A2	3/2005
----	--	-----------	----	--------

GB		2 357 397	A	6/2001
JP		10-336049	A	12/1998
JP		2002-530024		9/2002
JP		2006-514467		4/2006
JP		2006-238379		9/2006
WO		02/25974	A1	3/2002
WO		2004/082298	A2	9/2004
WO		2005/072001	A2	8/2005

OTHER PUBLICATIONS

3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Numbering, addressing and identification; (Release 7), 3 GPP TS 23.003 V7.1.0, Sep. 2006, pp. 1-52.

3rd Generation Partnership Project; Technical Specification Group Terminals; Technical realization of Cell Broadcast Service (CBS); (Release 1998), 3GPP TS 03.41 V7.4.0, Sep. 2000, pp. 1-31.

Guvenc, et al.; "Reliable Multicast and Broadcast Services in Relay-Based Emergency Communications;" IEEE Wireless Communications; Jun. 2008.

Khedo, K., et al.; "A Scalable Multimedia Multicast Protocol for Emergency Systems;" IEEE 2006.

LeBow, G.; "RBDS as an Emergency Broadcasting and Alert System;" IEEE; 1993.

* cited by examiner

FIG 1

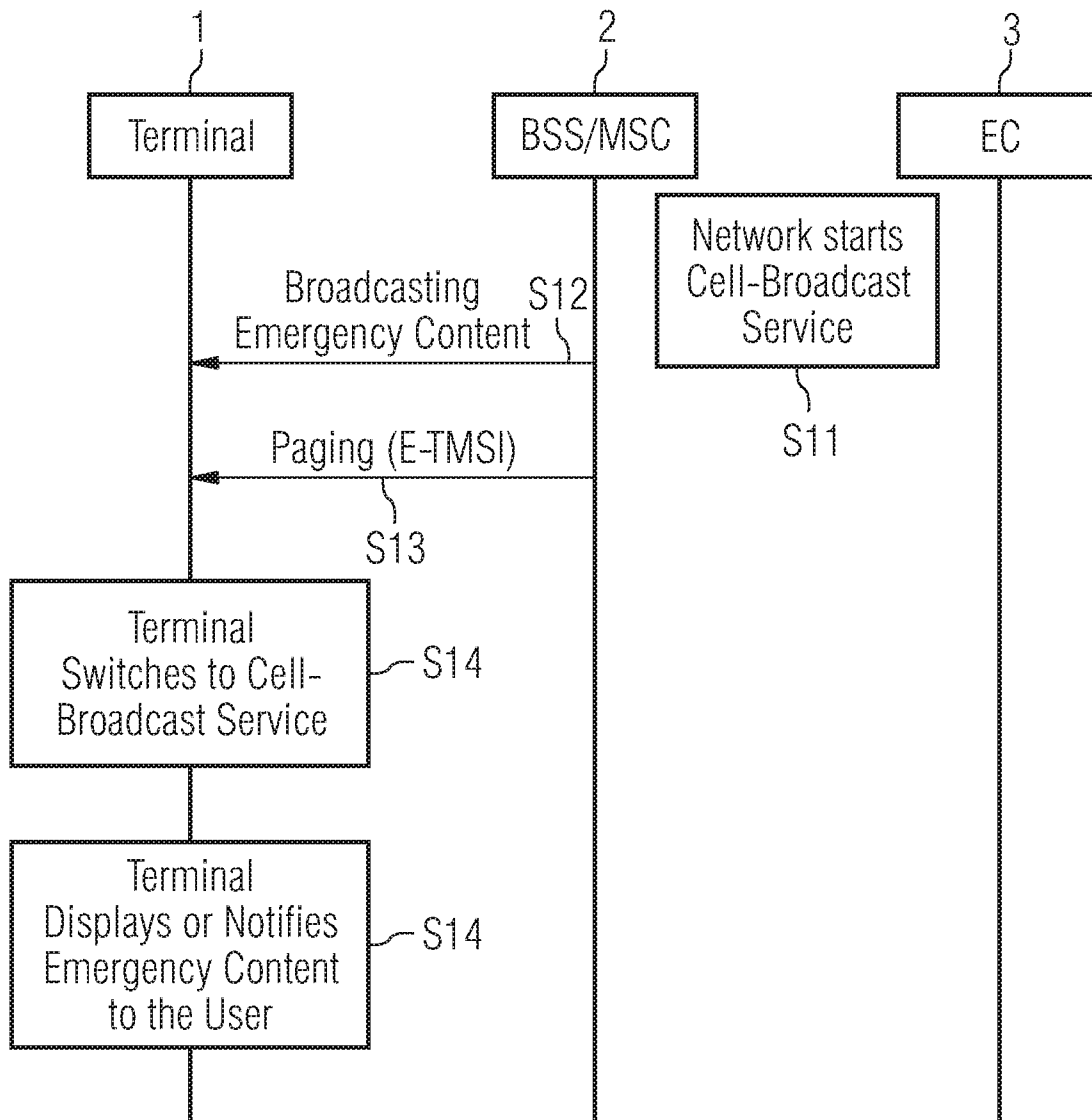
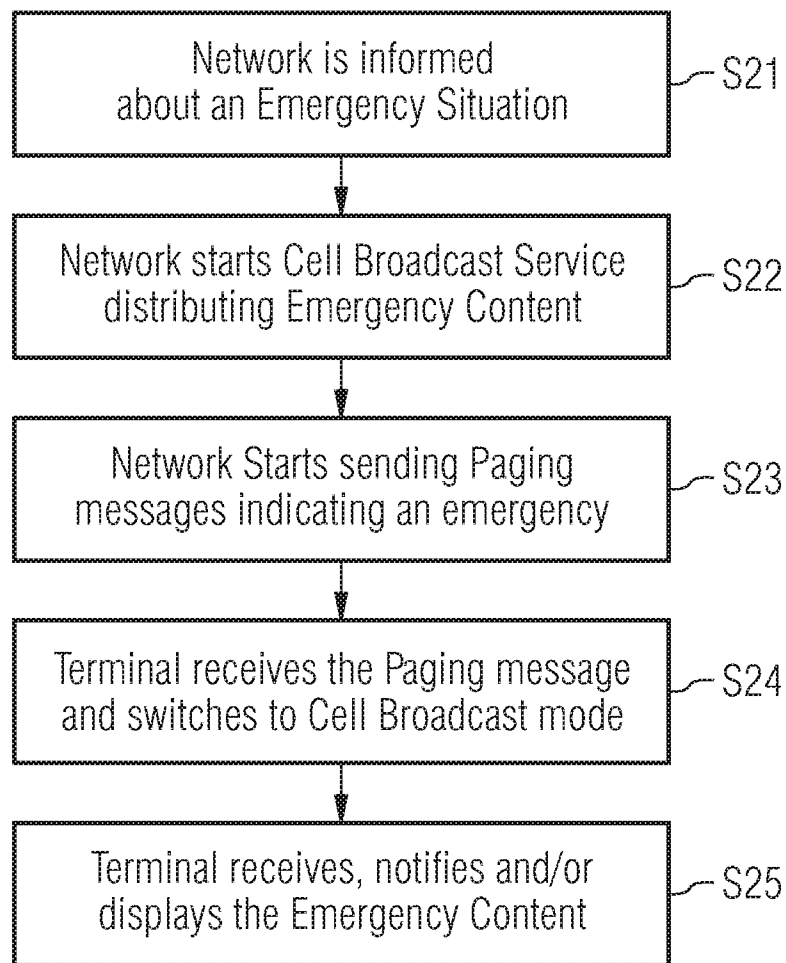


FIG 2



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