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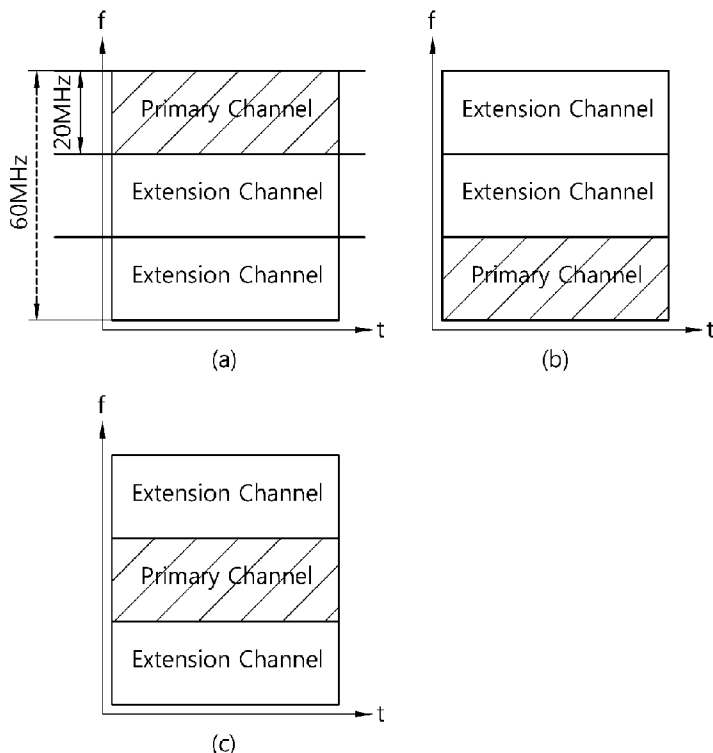
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(54) Title: METHOD AND APPARATUS OF ACCESSING CHANNEL IN WIRELESS COMMUNICATION SYSTEM

[Fig. 2]



(57) Abstract: A method and apparatus of accessing a channel in a wireless communication system is provided. The method includes receiving a first frame including configuration information on a channel allocated from a bandwidth including a primary channel, a secondary channel and an extension channel from an access point (AP), and transmitting a second frame to the AP by using the allocated channel. The configuration information includes an extension channel offset element field that sets the extension channel as the offset of the primary channel.

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B. FIELDS SEARCHED

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IPC 8 H04H 1/00 H04G 7/20

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

KOREAN UTILITY MODELS AND APPLICATIONS FOR UTILITY MODELS SINCE 1975

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

KOMPASS (KIPO internal) "CHANNEL""ACCESS""POINT""COMMUNICATION"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2006/0270339 A1 (MAHANY) 30 NOVEMBER 2006 Abstract, Claims	1, 6, 11
A	US 2005/0124335 A1 (CAVE et al.) 09 JUNE 2005 Abstract, Fig 2, Fig 4	1, 6, 11
A	US 6,636,737 B1 (HILLS et al.) 21 OCTOBER 2003 Fig 16, Claims	1, 6, 11

 Further documents are listed in the continuation of Box C. See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006-270339 A1	30.11.2006	AU 1998-98151 B2	03.02.2000
		AU 1995-31458 B2	14.01.1999
		AU 1995-40737 B2	21.01.1999
		CA 2476866 A1	07.07.1994
		CA 2152598 C	24.05.2005
		CA 615441A	21.03.2000
		EP 0353759 A2	07.02.1990
		EP 1585269 A2	12.10.2005
		EP 0573567 A4	23.03.1994
		EP 0609227 A1	10.08.1994
		EP 0686279 A1	13.12.1995
		EP 0686279 A4	26.03.1997
		EP 0716786 A1	19.06.1996
		EP 0716786 A4	06.05.1998
		EP 0740873 A1	06.11.1996
		EP 0740873 A4	30.01.2002
		EP 0784893 A1	23.07.1997
		EP 0784893 A4	08.11.2000
		EP 0353759 A3	29.05.1991
		EP 0494298 A1	15.07.1992
		EP 0494298 B1	04.06.1997
		EP 0511295 A1	17.12.1997
		EP 0512448 A1	11.11.1992
		EP 0512448 B1	09.04.1997
		EP 0573567 A1	15.12.1993
		EP 0573567 B1	17.05.2000
		EP 0606396 A1	24.11.1999
		EP 0606396 B1	12.06.2002
		EP 0609227 A1	06.05.1998
		EP 0645030 A1	29.03.1995
		EP 0667019 A1	04.04.2001
		EP 0667019 B1	17.09.2003
		EP 0681762 A1	24.08.2005
		EP 0681762 B1	18.10.2006
		EP 0686279 A1	17.05.2000
		EP 0716786 A1	08.05.2002
		EP 0740873 A1	14.09.2005
		EP 0740873 B1	21.12.2005
		EP 0752763 A2	08.01.1997
		EP 0752763 A3	26.02.1997
		EP 0752763 B1	17.09.2003
		EP 0784893 A1	12.01.2005
		EP 0784893 B1	15.06.2005
		EP 1246404 A2	02.10.2002
		EP 1246404 A3	16.10.2002
		EP 1246404 B1	22.03.2006
		EP 1378815 A2	07.01.2004
EP 1378815 A3	31.10.2007		
JP 05-147197 A	15.06.1993		
JP 03-041439 U	02.07.1997		

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2009/003572

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		KR 10-1997-0000777 B1	20.01.1997
		US 05371858 A	06.12.1994
		US 05408382 A	18.04.1995
		US 05418684 A	23.05.1995
		US 05425051 A	13.06.1995
		US 05466170 A	14.11.1995
		US 05468947 A	21.11.1995
		US 05468950 A	21.11.1995
		US 05483676 A	09.01.1996
		US 05488575 A	30.01.1996
		US 05515303 A	07.05.1996
		US 05517434 A	14.05.1996
		US 05521370 A	28.05.1996
		US 05530619 A	25.06.1996
		US 05539193 A	23.07.1996
		US 05539194 A	23.07.1996
		US 05541398 A	30.07.1996
		US 05546397 A	13.08.1996
=====			
US 2005-0124335 A1	09.06.2005	AR 046740 A1	21.12.2005
		AU 2004-310999 C1	03.07.2008
		AU 2004-310990 A1	16.06.2005
		AU 2004-310990 B2	16.08.2007
		AU 2004-310999 A1	16.06.2005
		AU 2004-310999 B2	26.07.2007
		AU 2004-310999 C1	26.07.2007
		PI 0415339 A	05.12.2006
		CA 2546773 A1	16.06.2005
		CA 2543104 A1	16.06.2005
		CN 1857016 A	01.11.2006
		CN 101103638 A	09.01.2008
		CN 1857016 C0	01.11.2006
		CN 101103638 A0	09.01.2008
		EP 1730972 A4	16.05.2007
		EP 1806004 A2	11.07.2007
		EP 1730972 A2	13.12.2006
		JP 2007-513548 A	24.05.2007
		JP 2007-513550 T	24.05.2007
		JP 2007-513550 T	24.05.2007
		JP 2007-513550 A	24.05.2007
		KR 10-2007-0018779 A	14.02.2007
		KR 10-2007-0106555 A	01.11.2007
		KR 10-2007-0018786 A	14.02.2007
		PA 06003807 A	14.06.2006
		PA 06003807 A	14.06.2006
		NO 20063081 A	03.07.2006
		TW 252047 B	21.03.2006
		US 2009-042583 A1	12.02.2009
		US 07016684 B2	21.03.2006
		US 07454205 B2	18.11.2008
		US 2006-0258395 A1	16.11.2006

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2009/003572

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		US 2006-0121929 A1	08.06.2006
		US 2005-0119006 A1	02.06.2005
		US 07493123 B2	17.02.2009
		US 07454214 B2	18.11.2008
		WO 2005-055493 A3	16.06.2005
		WO 2005-055621 A2	16.06.2005
		WO 2005-055493 A2	16.06.2005
		WO 2005-055493 A3	09.09.2005
		WO 2005-055493 A3	09.09.2005
		WO 2005-055621 A3	16.06.2005
=====			
US 06636737 B1	21.10.2003	AU 5327401 A	30.10.2001
		AU 2001-53274 A1	30.10.2001
		AU 2001-253274 A8	30.10.2001
		WO 01-80500 A3	10.10.2002
		WO 2001-080500 A2	25.10.2001
		WO 2001-080500 A3	25.10.2001
=====			