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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))

[Continued on next page]

(54) **Title:** METHOD AND APPARATUS FOR IMPROVED FRAME SYNCHRONIZATION IN A WIRELESS COMMUNICATION NETWORK

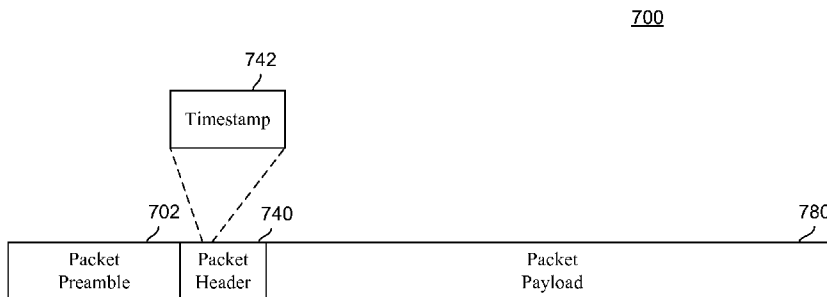


FIG. 7

(57) **Abstract:** A wireless network uses an improved frame structure to increase timing acquisition capabilities as well as reduction of spectral lines. In one aspect, the frame packet can be used to communicate the different modes of operation under which the packet was created.



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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. H04B1/69 H04W74/00

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)
H04B 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 practical, search terms used)

EPO-Internal, INSPEC, 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	US 2005/169292 A1 (YOUNG SONG-LIN [US]) 4 August 2005 (2005-08-04)	1-31, 36, 37, 41, 42, 47, 48
Y	abstract paragraphs [0002] - [0005], [0015] - [0019], [0032] - [0036]	32-35, 38-40, 43-46
X	US 2006/067280 A1 (HOWARD JOHN S [US] ET AL) 30 March 2006 (2006-03-30)	1-31, 36, 37, 41, 42, 47, 48
Y	abstract figures 2,3 paragraphs [0009] - [0052]	32-35, 38-40, 43-46
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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 document 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

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3 June 2009

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INTERNATIONAL SEARCH REPORT

International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2005/112354 A (KONINKL PHILIPS ELECTRONICS NV [NL]; LI. PEN C [US]; GARG PARAG [US]; G) 24 November 2005 (2005-11-24) abstract; figure 3 page 5, line 6 - line 21 -----	32-35, 38-40, 43-46
Y	JOONGHEON KIM ET AL: "Power Saving Medium Access for Beacon-Enabled IEEE 802.15.4 LR-WPANS" HUMAN INTERFACE AND THE MANAGEMENT OF INFORMATION. INTERACTING IN INFORMATION ENVIRONMENTS; [LECTURE NOTES IN COMPUTER SCIENCE], SPRINGER BERLIN HEIDELBERG, BERLIN, HEIDELBERG, vol. 4558, 22 July 2007 (2007-07-22), pages 555-562, XP019064405 ISBN: 978-3-540-73353-9 * Section 3 * abstract -----	32-35, 38-40, 43-46

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/082117

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-31,36,37,41,42,47,48

Method and device for generating a packet with a header containing location information of the packet itself respect to a beacon in the superframe, whereby the location information indicates a time offset to a fixed point within the superframe.

2. claims: 30, 32-36,38-41,43-46

Method and device for entering a power save mode when it is determined that it is not the right time to transmit.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2008/082117

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2005169292	A1	04-08-2005	NONE	
US 2006067280	A1	30-03-2006	WO 2006039607	A1 13-04-2006
WO 2005112354	A	24-11-2005	EP 1751921	A1 14-02-2007
			JP 2007537654	T 20-12-2007