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(54) Title: COMMON RADIO ELEMENT APPLICATION MANAGER ARCHITECTURE FOR WIRELESS PICOCELLS

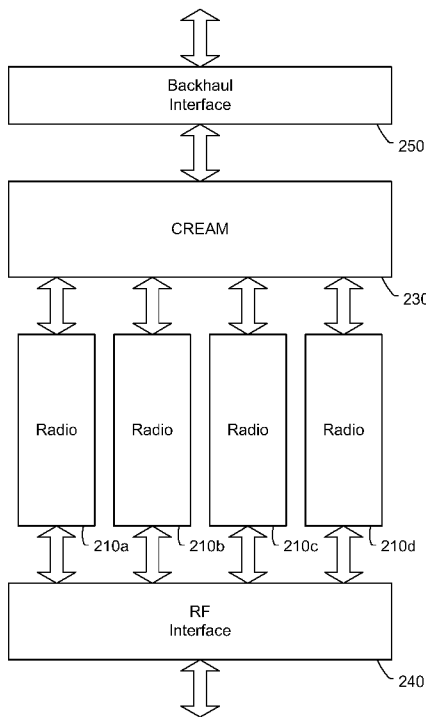


FIG. 2

(57) Abstract: A multi-modal multi-modulation base station such as a picocell is disclosed.. The base station can include multiple radio devices that can be configured to communicate with user devices using different protocols and different frequencies. The base station includes a backhaul interface to core networks that can also operate according to multiple protocols. A common radio element application manager control operations of the radio devices including core network connectivity, mode-to-mode communications, and synchronization of picocell features.

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SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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A. CLASSIFICATION OF SUBJECT MATTER***H04W 88/10(2009.01)i, H04L 29/10(2006.01)i***

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 88/10; H04L 27/00; H04W 88/06; H04L 25/00; H04B 7/216; H04W 4/18

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

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: base station, protocol,

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	US 2002-0064142 A1 (FRANKLIN P. ANTONIO et al.) 30 May 2002 See abstract, paragraphs 37-39, 82 and figure 4.	1,5-16,26-28,31-34 2-4,35,36 17-25,29,30
Y A	KR 10-2010-0106852 A (PANTECH CO., LTD.) 04 October 2010 See abstract and paragraph 96.	2-4,35,36 1,5-34
A	US 2002-0024993 A1 (RAVI SUBRAMANIAN et al.) 28 February 2002 See abstract.	1-36

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

* Special categories of cited documents:

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"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

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002-0064142 A1	30.05.2002	None	
KR 10-2010-0106852 A	04.10.2010	CN 102362514 A US 2012-0009913 A1 WO 2010-110595 A2	22.02.2012 12.01.2012 30.09.2010
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