

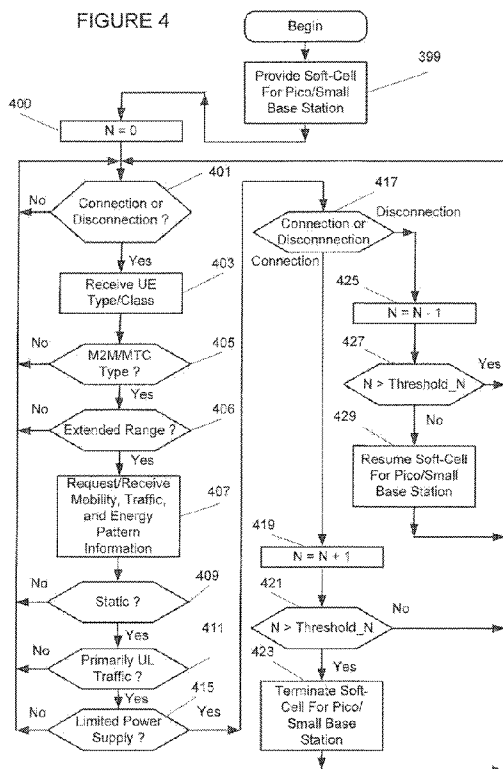


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[Continued on next page]

(54) Title: METHODS CONTROLLING EXTENDED RANGE AREAS IN HETEROGENEOUS NETWORKS AND RELATED NETWORK NODES



(57) Abstract: A method may provide wireless communications in a network including a first base station and a second base station, with the first base station operating within a coverage area of the second base station. The method may include providing soft-cell communications in an extended range area of the first base station, with the extended range area being outside a primary range area of the first base station. A number of wireless devices in the extended range area connected and/or communicating with the first base station may be tracked. Responsive to the number of wireless devices in the extended range area connected and/or communicating with the first base station exceeding a threshold (Threshold_N), the extended range area over which soft-cell communications are provided may be reduced.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 INV. H04W72/04
 ADD. H04W84/04

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, 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.
Y	US 2012/270553 A1 (HA KWANG-JUN [KR]) 25 October 2012 (2012-10-25) paragraph [0012] - paragraph [0028] paragraph [0070] - paragraph [0076]; figures 2,3	1-26
Y	----- WO 2012/059310 A1 (ALCATEL LUCENT [FR]; GERLACH CHRISTIAN [DE]; STANZE OLIVER [DE]; CESAR) 10 May 2012 (2012-05-10) page 13 - page 15; figure 2 page 26 - page 27	1,14
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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 application or patent but published on or after the international filing date
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- "&" document member of the same patent family

Date of the actual completion of the international search 20 May 2014	Date of mailing of the international search report 28/05/2014
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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 Latoria, Gianluca
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International application No
PCT/IB2013/059280

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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A	2.2 Wide-area/Local-area interaction - Soft Cell	1,14
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INTERNATIONAL SEARCH REPORT

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