



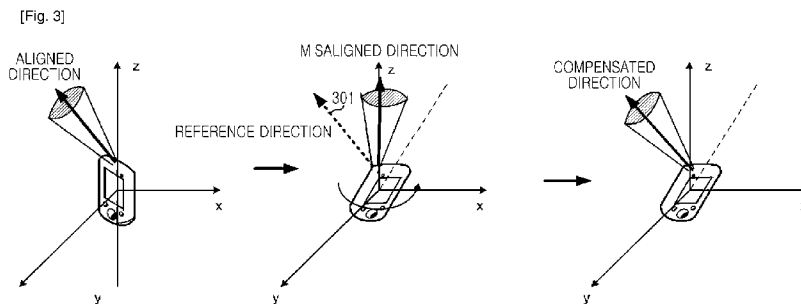
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(54) Title: APPARATUS AND METHOD FOR BEAM LOCKING IN A WIRELESS COMMUNICATION SYSTEM



(57) Abstract: According to one embodiment, an apparatus for beamforming includes a detector for measuring at least one change of movement and rotation of an apparatus; and a calculator for determining a beamforming parameter for aligning a beam direction with another apparatus by compensating for the change of the beam direction according to at least one of the movement and the rotation.

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A. CLASSIFICATION OF SUBJECT MATTER**H04B 7/04(2006.01)i, H01Q 3/24(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)

H04B 7/04; H01Q 3/00; H04M 1/00; G01S 13/90; H01Q 3/24

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: wireless, beamform, beamlock, move, rotate, compensate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6184825 B1 (WEHNER; JAMES W. et al.) 06 February 2001 See abstract; column 4, line 55 - column 5, line 11; claims 1-12 and figure 4.	1-4,6-7,9,11
A		5,8,10,12-15
A	US 2007-0205943 A1 (KARIM NASSIRI-TOUSSI et al.) 06 September 2007 See abstract; claim 1 and figure 1.	1-15
A	US 2005-0179579 A1 (SHANE PINDER et al.) 18 August 2005 See abstract; claim 1 and figures 1,4.	1-15
A	US 2010-0164802 A1 (LI QINGHUA et al.) 01 July 2010 See abstract; claim 1.	1-15

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

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"&" document member of the same patent family


Date of the actual completion of the international search

28 JANUARY 2013 (28.01.2013)

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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