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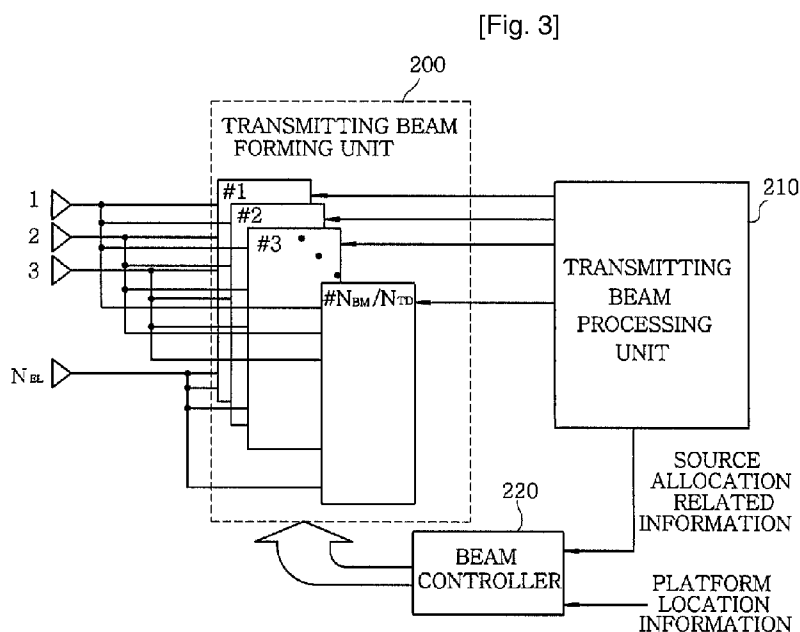
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(54) Title: MULTI-BEAM TRANSMITTING AND RECEIVING APPARATUS



(57) Abstract: A multi-beam transmitting and receiving apparatus in a wireless communication system includes a plurality of transmitting beam forming units (200) for forming timely-divided multiple beams, each of the timely-divided multiple beams having a period of a total number of time division NTD at every time TD when the beams are activated; and a beam controller (220) for controlling the transmitting beam forming units (200) to select an arbitrary beam forming unit (200) of a plurality of the transmitting beam forming units (200) according to information about the time division, wherein the number of the beam forming units (200) is determined as the total number of the beams NBM divided by the number of time division NTD.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC⁸: **H04B 7/185** (2006.01); **H04B 7/204** (2006.01)

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)

IPC⁸: H04B

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)

EPODOC, WPI, NPL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2005/050871 A1 (ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE) 2 June 2005 (02.06.2005) <i>Abstract, paragraphs 0001 - 0012, figures 1, 2</i> --	1 - 14
A	US 2005/122264 A1 (Coromina) 9 June 2005 (09.06.2005) <i>Whole document</i> --	1 - 14
A	WO 2005/029729 A2 (QUALCOMM Inc.) 31 March 2005 (31.03.2005) <i>Abstract, paragraphs 0005 - 0009, 0026 - 0028</i> --	1 - 14

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

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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.
A	US 2004/114552 A1 (Lim et al.) 17 June 2004 (17.06.2004) <i>Abstract, paragraphs 0002 - 0021</i> -----	1 - 14

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Information on patent family members

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