Title (en)

METHODS OF BEAM CODEBOOK GENERATION FOR 5G TERMINALS

Title (de

VERFAHREN ZUR ERZEUGUNG EINES STRAHLENCODEBUCHS FÜR 5G-ENDGERÄTE

Title (fr)

PROCÉDÉS DE GÉNÉRATION DE LIVRE DE CODES DE FAISCEAU POUR TERMINAUX 5G

Publication

EP 3785377 A4 20210623 (EN)

Application

EP 19807907 A 20190527

Priority

- US 201862676718 P 20180525
- US 201862716597 P 20180809
- US 201862740564 P 20181003
- US 201862742035 P 20181005
- US 201816224531 A 20181218
- KR 2019006321 W 20190527

Abstract (en

[origin: WO2019226028A1] The present disclosure relates to a communication method and system for converging a 5th-Generation (5G) communication system for supporting higher data rates beyond a 4th-Generation (4G) system with a technology for Internet of Things (IoT). The present disclosure may be applied to intelligent services based on the 5G communication technology and the IoT-related technology, such as smart home, smart building, smart city, smart car, connected car, health care, digital education, smart retail, security and safety services. A method of a user equipment (UE) in a wireless communication system is provided. The method comprises identifying E-field data of each antenna of the UE to be used for transmitting and receiving data, generating, based on the E-field data, a set of codewords including a first and second upper bounds, the set of codewords corresponding to candidate beams of each antenna, selecting at least one codeword from the set of codewords based on a performance criteria, configuring a codebook to be used for each antenna by adding the at least one codeword into the codebook, determining whether the codebook including the at least one codeword satisfies a condition to stop adding another codeword to the codebook, and applying the configured codebook for use in transmitting or receiving the data at each antenna based on whether the condition is satisfied.

IPC 8 full level

H04B 7/0456 (2017.01); H04B 7/0404 (2017.01); H04B 7/06 (2006.01)

CPC (source: EP)

H04B 7/0404 (2013.01); H04B 7/0465 (2013.01); H04B 7/0695 (2013.01)

Citation (search report)

- [I] EP 3293890 A1 20180314 INTEL IP CORP [US]
- ÎĂJ WO 2017003252 A1 20170105 LG ELECTRONICS INC [KR] & US 2018198501 A1 20180712 PARK HAEWOOK [KR], et al
- [A] US 2011164696 A1 20110707 CHOI JUNIL [KR], et al
- See also references of WO 2019226028A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019226028 A1 20191128; CN 112075033 A 20201211; CN 112075033 B 20240209; EP 3785377 A1 20210303; EP 3785377 A4 20210623

DOCDB simple family (application)

KR 2019006321 W 20190527; CN 201980029827 A 20190527; EP 19807907 A 20190527