



US 20230231600A1

(19) **United States**

(12) **Patent Application Publication**
ZHAN et al.

(10) **Pub. No.: US 2023/0231600 A1**

(43) **Pub. Date: Jul. 20, 2023**

(54) **SYSTEMS, METHODS, AND APPARATUS
FOR DETERMINING PRECODING
INFORMATION FOR BEAMFORMING**

(52) **U.S. Cl.**
CPC **H04B 7/0456** (2013.01); **H04B 7/0617**
(2013.01)

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(57) **ABSTRACT**

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A method may include determining, for a channel, a target component of precoding information, determining at least a part of the precoding information based on the target component and a decompressed component of the precoding information, and sending, from a user equipment, the at least a part of the precoding information. Determining the at least a part of the precoding information may be based on a correlation between the target component and the decompressed component. The at least a part of the precoding information may include a vector of coefficients. The vector of coefficients may include a vector of complex numbers. At least one of the complex numbers may include an amplitude representing a scaling coefficient and a phase representing a rotation coefficient. The target component may include a target matrix. The decompressed component may include a decompressed matrix. The target matrix may include a linear combination coefficients matrix. The precoding information may include a precoding matrix indicator.

(21) Appl. No.: **17/852,358**

(22) Filed: **Jun. 28, 2022**

Related U.S. Application Data

(60) Provisional application No. 63/301,049, filed on Jan. 19, 2022.

Publication Classification

(51) **Int. Cl.**
H04B 7/0456 (2006.01)
H04B 7/06 (2006.01)

