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LEE et al.(10) **Pub. No.: US 2023/0232372 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **BASE STATION DEVICE AND OPERATING METHOD THEREOF IN WIRELESS COMMUNICATION SYSTEM****Publication Classification**(51) **Int. Cl.****H04W 72/02** (2006.01)**H04W 72/541** (2006.01)**H04L 5/00** (2006.01)(52) **U.S. Cl.****CPC** **H04W 72/02** (2013.01); **H04W 72/541** (2023.01); **H04L 5/0051** (2013.01)(71) Applicant: **SAMSUNG ELECTRONICS CO., LTD.**, Suwon-si (KR)(72) Inventors: **Sunyoung LEE**, Suwon-si (KR); **Jinho Kim**, Suwon-si (KR); **Hongsik Yoon**, Suwon-si (KR)(73) Assignee: **SAMSUNG ELECTRONICS CO., LTD.**, Suwon-si (KR)(21) Appl. No.: **18/097,667**(22) Filed: **Jan. 17, 2023**(30) **Foreign Application Priority Data**

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(57) **ABSTRACT**

A base station device includes a communication circuit configured to receive a first signal from an external base station device and transmit a second signal to a user equipment, by using a plurality of antennas, and a processor configured to obtain resource allocation information of the external base station device based on the first signal, identify whether an interference cell occurs, and generate the second signal when the interference cell occurs, the second information including resource allocation information of the interference cell.

