



US 20230231687A1

(19) **United States**

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

(10) **Pub. No.: US 2023/0231687 A1**

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

(54) **POSITIONING REFERENCE SIGNAL PRS  
ASSOCIATION METHOD AND  
COMMUNICATION APPARATUS**

(71) Applicant: **HUAWEI TECHNOLOGIES CO.,  
LTD.**, Shenzhen (CN)

(72) Inventors: **Su HUANG**, Shanghai (CN); **Xin  
GAO**, Beijing (CN)

(73) Assignee: **HUAWEI TECHNOLOGIES CO.,  
LTD.**, Shenzhen (CN)

(21) Appl. No.: **18/189,719**

(22) Filed: **Mar. 24, 2023**

**Related U.S. Application Data**

(63) Continuation of application No. PCT/CN2021/  
120541, filed on Sep. 26, 2021.

**Foreign Application Priority Data**

Sep. 28, 2020 (CN) ..... 202011045801.1

**Publication Classification**

(51) **Int. Cl.**  
**H04L 5/00** (2006.01)  
**H04W 24/08** (2006.01)  
(52) **U.S. Cl.**  
CPC ..... **H04L 5/0051** (2013.01); **H04W 24/08**  
(2013.01)

(57) **ABSTRACT**

This application provides a positioning reference signal PRS association method and a communication apparatus. The method includes: A terminal device receives second configuration information sent by a positioning management device, where the second configuration information indicates an association relationship between PRSs on at least two frequencies; and the terminal device measures the PRSs having the association relationship, where the PRSs having the association relationship share a same antenna port or the PRSs having the association relationship have a phase difference. By implementing this application, large-bandwidth PRS configuration can be implemented.

