



US 20220360267A1

(19) **United States**

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

(10) **Pub. No.: US 2022/0360267 A1**

(43) **Pub. Date: Nov. 10, 2022**

(54) **PHASE-LOCKED LOOP CIRCUIT,
CONFIGURATION METHOD THEREFOR,
AND COMMUNICATION APPARATUS**

(71) Applicant: **ZTE Corporation**, Shenzhen (CN)

(72) Inventors: **Jun LIU**, Shenzhen (CN); **Zhaobi WEI**, Shenzhen (CN); **Shan WANG**, Shenzhen (CN); **Pei DUAN**, Shenzhen (CN); **Mengbi LEI**, Shenzhen (CN)

(21) Appl. No.: **17/624,063**

(22) PCT Filed: **Jun. 19, 2020**

(86) PCT No.: **PCT/CN2020/097225**

§ 371 (c)(1),

(2) Date: **Dec. 30, 2021**

(30) **Foreign Application Priority Data**

Jul. 2, 2019 (CN) 201910591540.4

Publication Classification

(51) **Int. Cl.**

H03L 7/081 (2006.01)

H03L 1/02 (2006.01)

H03L 7/08 (2006.01)

H03L 7/10 (2006.01)

(52) **U.S. Cl.**

CPC **H03L 7/081** (2013.01); **H03L 1/02** (2013.01); **H03L 7/0802** (2013.01); **H03L 7/10** (2013.01)

(57)

ABSTRACT

Provided is a phase-locked loop circuit, a method for configuring the same, and a communication device. The phase-locked loop circuit includes a phase-locked loop main circuit and a phase temperature compensation circuit. The phase temperature compensation circuit includes at least one phase delay unit connected to the phase-locked loop main circuit and configured to generate a phase shift as a result of a temperature change for cancelling out a phase shift generated by the phase-locked loop main circuit as a result of a temperature change.

