

# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2022/0407468 A1 TORII et al.

(43) **Pub. Date:** 

Dec. 22, 2022

### (54) **DOHERTY AMPLIFIER**

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Appl. No.: 17/893,316

(22) Filed: Aug. 23, 2022

### Related U.S. Application Data

(63)Continuation of application No. PCT/JP2020/ 017949, filed on Apr. 27, 2020.

#### **Publication Classification**

(51) Int. Cl.

H03F 1/02 (2006.01)H03F 3/21 (2006.01) (52) U.S. Cl.

CPC ...... *H03F 1/0288* (2013.01); *H03F 3/211* 

(2013.01); H03F 2200/451 (2013.01)

#### (57)ABSTRACT

A Doherty amplifier includes: a first amplifying element to amplify a first signal; a second amplifying element to amplify a second signal having a phase difference with the first signal; a first transmission line connected to an output terminal of the first amplifying element; and a second transmission line connected to an output terminal of the second amplifying element, wherein the first transmission line and the second transmission line are equal to each other in characteristic impedance, the phase difference between the first signal and the second signal is not equal to a difference in electrical length between the second transmission line and the first transmission line, and the first signal having passed through the first transmission line and the second signal having passed through the second transmission line are subjected to different phase synthesis.

