

# (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2022/0376662 A1 Datta et al.

#### Nov. 24, 2022 (43) Pub. Date:

## (54) RECONFIGURABLE POWER AMPLIFIERS WITH CONTROLLABLE INPUT CAPACITANCE

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(21) Appl. No.: 17/663,077

(22) Filed: May 12, 2022

## Related U.S. Application Data

(60) Provisional application No. 63/201,953, filed on May 20, 2021, provisional application No. 63/201,955, filed on May 20, 2021.

### **Publication Classification**

Int. Cl. (51)H03F 3/191 (2006.01)H03F 3/30 (2006.01)

(52) U.S. Cl. ...... *H03F 3/191* (2013.01); *H03F 3/3083* CPC (2013.01); H03F 2200/06 (2013.01); H03F 2200/09 (2013.01); H03F 2200/111 (2013.01); H03F 2200/451 (2013.01)

#### (57)ABSTRACT

Apparatus and methods for reconfigurable power amplifiers are disclosed. In certain embodiments, a mobile device includes a transceiver configured to generate a first radio frequency signal of a first frequency band and a second radio frequency signal of a second frequency band, and a frontend system including a push-pull power amplifier configured to selectively amplify one of the first radio frequency signal or the second radio frequency signal based on a band control signal. The push-pull power amplifier includes an input balun, an output balun, and a pair of amplifiers coupled between the input balun and the output balun. The band control signal is operable to control an input capacitance of the pair of amplifiers.

