



US 20240235502A1

(19) **United States**

(12) **Patent Application Publication**
PARK

(10) **Pub. No.: US 2024/0235502 A1**

(43) **Pub. Date: Jul. 11, 2024**

(54) **SELF-CONTROLLED INPUT DATA BUFFER
CIRCUIT CAPABLE OF AUTOMATICALLY
ADJUSTING POWER GAIN**

Publication Classification

(51) **Int. Cl.**
H03F 3/45 (2006.01)
H03F 1/26 (2006.01)
(52) **U.S. Cl.**
CPC *H03F 3/45197* (2013.01); *H03F 1/26*
(2013.01); *H03F 3/45273* (2013.01)

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(21) Appl. No.: **18/201,198**

(22) Filed: **May 24, 2023**

(30) **Foreign Application Priority Data**

Jan. 9, 2023 (CN) 202310027034.9
Jan. 9, 2023 (CN) 202320053367.4

(57) **ABSTRACT**

A self-controlled input data buffer circuit includes a first amplifier, a second amplifier, a feedback signal generator, and a gain control unit. The first amplifier includes a first input terminal for receiving a data signal, a second input terminal for receiving a reference signal, a first output terminal, and a second output terminal. The second amplifier is coupled to the first output terminal of the first amplifier and the second output terminal of the first amplifier. The feedback signal generator is coupled to the second amplifier. The gain control unit is coupled to the feedback signal generator, the second input terminal of the first amplifier, the first output terminal of the first amplifier, and the second output terminal of the first amplifier.

