US 20240214012A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2024/0214012 A1**

CN et al. (43) **Pub. Date: Jun. 27, 2024**

(54) **WIRED TRANSMITTER WITH OVERVOLTAGE PROTECTION**

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(21) Appl. No.: **18/529,371**

(22) Filed: **Dec. 5, 2023**

(30) **Foreign Application Priority Data**

Dec. 21, 2022 (CN) 202211650776.9

Publication Classification

(51) **Int. Cl.**

H04B 1/04 (2006.01)
H03K 17/081 (2006.01)
H03K 17/687 (2006.01)
H03M 1/66 (2006.01)

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

CPC ***H04B 1/04*** (2013.01); ***H03K 17/08104*** (2013.01); ***H03K 17/687*** (2013.01); ***H03M 1/66*** (2013.01); *H04B 2001/0408* (2013.01)

(57) **ABSTRACT**

A wired transmitter includes a digital-to-analog converter (DAC) and a line driver. The DAC generates first output signals according to a digital code, wherein a first circuit in the DAC operates in a first voltage domain and a second circuit of the DAC operates in a second voltage domain, and an upper limit of the first voltage domain is lower than an upper limit of the second voltage domain. The line driver operates in the second voltage domain, and generates second output signals according to the first output signals. Each of the DAC and the line driver is implemented by transistors corresponding to the first voltage domain.