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**ICHIHARA et al.**(10) **Pub. No.: US 2022/0360274 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **AD CONVERTER****H03M 1/50** (2006.01)**H03M 3/00** (2006.01)(71) Applicant: **Asahi Kasei Microdevices Corporation**, Tokyo (JP)(52) **U.S. Cl.****CPC** ..... **H03M 1/1245** (2013.01); **H03M 1/361** (2013.01); **H03M 1/0854** (2013.01); **H03M 1/50** (2013.01); **H03M 3/39** (2013.01)(72) Inventors: **Eizo ICHIHARA**, Tokyo (JP);  
**Shintaro KAWAZOE**, Tokyo (JP)(21) Appl. No.: **17/728,985**(22) Filed: **Apr. 26, 2022**(30) **Foreign Application Priority Data**

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**ABSTRACT**

Provided is an AD converter, including: an analog signal input circuit, configured to be input with an analog input signal, and output a first analog output signal based on the analog input signal and a second analog output signal based on the analog input signal at different timing; an integral circuit, configured to integrate the first analog output signal and the second analog output signal and output the first integral signal and the second integral signal; a predictive circuit, configured to predict an integral signal output after the output by the integral circuit based on the first integral signal and the second integral signal output by the integral circuit, and output a predictive integral signal; and a quantization circuit, configured to generate a digital signal with the predictive integral signal quantized.

