



US 20220352840A1

(19) **United States**(12) **Patent Application Publication**
SHIMIZU et al.(10) **Pub. No.: US 2022/0352840 A1**(43) **Pub. Date: Nov. 3, 2022**(54) **THREE-PHASE DC MOTOR DRIVING
CIRCUIT, COOLING DEVICE AND
ELECTRONIC MACHINE USING THEREOF****Publication Classification**(51) **Int. Cl.**
H02P 27/08 (2006.01)(52) **U.S. Cl.**
CPC **H02P 27/085** (2013.01)(71) Applicant: **ROHM CO., LTD.**, Kyoto-shi (JP)(72) Inventors: **Hiroyuki SHIMIZU**, Kyoto-shi (JP);
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SAEGUSA**, Kyoto-shi (JP)(57) **ABSTRACT**

The present disclosure provides a motor driving circuit of capable of stopping operation within a short period of time. A bridge circuit of the present disclosure is connected to a fan motor. In response to a stop instruction, a control logic circuit fixes an upper arm of a source phase in which a current flows out to be off in the bridge circuit, and maintains statuses of other upper arms and lower arms. The control logic circuit then fixes the upper arms and the lower arms of all phases of the bridge circuit to be off.

(21) Appl. No.: **17/729,636**(22) Filed: **Apr. 26, 2022**(30) **Foreign Application Priority Data**

Apr. 30, 2021 (JP) 2021-077043

