



US 20240224457A1

(19) **United States**

(12) **Patent Application Publication**
HOSAKA

(10) **Pub. No.: US 2024/0224457 A1**

(43) **Pub. Date: Jul. 4, 2024**

(54) **SWITCHING POWER SUPPLY DEVICE AND
POWER CONVERSION DEVICE**

Publication Classification

(71) Applicant: **Panasonic Automotive Systems Co.,
Ltd.**, Kanagawa (JP)

(72) Inventor: **Ryota HOSAKA**, Tokyo (JP)

(21) Appl. No.: **18/602,775**

(22) Filed: **Mar. 12, 2024**

(51) **Int. Cl.**

H05K 7/14 (2006.01)

H02M 3/00 (2006.01)

H05K 7/20 (2006.01)

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

CPC **H05K 7/14322** (2022.08); **H02M 3/003**
(2021.05); **H05K 7/20272** (2013.01)

Related U.S. Application Data

(63) Continuation of application No. PCT/JP2022/
018468, filed on Apr. 21, 2022.

(30) **Foreign Application Priority Data**

Sep. 21, 2021 (JP) 2021-153424

(57)

ABSTRACT

A switching power supply device according to the present disclosure includes: a first circuit board; a second circuit board; and a housing that accommodates the first circuit board and the second circuit board. A part of the housing is a barrier that separates the first circuit board and the second circuit board.

