



US 20220369509A1

(19) **United States**(12) **Patent Application Publication**
FILATAU(10) **Pub. No.: US 2022/0369509 A1**(43) **Pub. Date: Nov. 17, 2022**(54) **COOLING DEVICE**(52) **U.S. Cl.**(71) Applicant: **Huawei Digital Power Technologies Co., Ltd.**, Futian District (CN)CPC **H05K 7/20309** (2013.01); **H05K 7/20318** (2013.01); **H05K 7/20818** (2013.01); **H05K 7/20827** (2013.01); **H05K 7/20327** (2013.01)(72) Inventor: **Sviataslau Alehovich FILATAU**, Minsk (BY)

(57)

ABSTRACT(21) Appl. No.: **17/537,934**(22) Filed: **Nov. 30, 2021****Related U.S. Application Data**

(63) Continuation of application No. PCT/BY2021/000006, filed on May 12, 2021.

Publication Classification(51) **Int. Cl.****H05K 7/20**

(2006.01)

A cooling device comprising a cooling circuit comprising a compressor, which is adapted to compress cooling agent in the cooling circuit during an active cooling mode, wherein the compressed cooling agent contains lubricant oil from the compressor; a condensing unit, which is connected to the compressor by a first fluid line of the cooling circuit; an evaporator, which comprises a top part, a bottom part, and a plurality of evaporating tubes connecting the top part with the bottom part, wherein the top part is connected to the condensing unit by a second fluid line of the cooling circuit, and wherein the bottom part is connected to the compressor by a third fluid line of the cooling circuit.

