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(19) **United States**(12) **Patent Application Publication**
KOH(10) **Pub. No.: US 2024/0213762 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **POWER CONDITIONING SYSTEM
SUPPORTING HOT SWAPPING AND
CONTROL METHOD OF POWER
CONDITIONING SYSTEM***H02M 1/00* (2006.01)*H02M 1/36* (2006.01)*H02M 7/00* (2006.01)*H02M 7/493* (2006.01)(71) Applicant: **LS ELECTRIC CO., LTD.**, Anyang-si,
Gyeonggi-do (KR)(52) **U.S. Cl.**CPC *H02H 7/122* (2013.01); *H02J 3/38*
(2013.01); *H02M 1/0009* (2021.05); *H02M**1/36* (2013.01); *H02M 7/003* (2013.01);*H02M 7/493* (2013.01)(72) Inventor: **Kwangsoo KOH**, Anyang-si,
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The present disclosure relates to a power conditioning system comprising: a converter including a plurality of inverters formed in the form of power electronics building blocks (PEBBs); and a system control unit for: controlling the plurality of inverters such that the plurality of inverters are driven independently of each other; receiving status information from each of the plurality of PEBBs and detecting a specific PEBB requiring maintenance according to the received status information; when the specific PEBB is detected, deactivating an inverter of the specific PEBB separately from the remaining PEBBs; and controlling the driving of the remaining PEBBs such that the power conditioning system continuously operates while the specific PEBB is inactive.

