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AND AXIAL MAGNETIC FIELD MOTOR**

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(71) Applicant: **SHANGHAI PANGOOD POWER  
TECHNOLOGY CO., LTD.**, Shanghai  
(CN)

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(72) Inventors: **Guangquan ZHANG**, Shanghai (CN);  
**Lei TANG**, Shanghai (CN); **Liang  
PENG**, Shanghai (CN)

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(57) **ABSTRACT**

A cooling system includes a housing. A bottom of the housing has an installation position for installing a stator iron core. The cooling system further includes: an oil inlet cavity and an oil return cavity, an oil inlet and an oil outlet provided on an outer wall of the housing, an oil spraying hole and an oil return hole provided on an inner wall of the housing, and a plurality of oil diverting grooves provided at the bottom of the housing. The oil diverting grooves penetrate through the installation position. A stator component includes a stator iron core and the cooling system. An axial magnetic field motor includes the stator component.

