



US 20230231451A1

(19) **United States**(12) **Patent Application Publication****DEUTSCH et al.**(10) **Pub. No.: US 2023/0231451 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **METHOD FOR MOUNTING FORM-WOUND COILS OR TOOTH-WOUND COILS****H02K 15/06**
H02K 3/12(2006.01)
(2006.01)(71) Applicant: **Flender GmbH**, 46395 Bocholt (DE)(72) Inventors: **ARTUR DEUTSCH**, Bad Griesbach i. Rottal (DE); **NORBERT SCHÖNBAUER**, Bad Füssing (DE); **MICHAEL WEGER**, Kösslarn (DE)(52) **U.S. Cl.**
CPC **H02K 15/045** (2013.01); **H02K 1/165** (2013.01); **H02K 3/12** (2013.01); **H02K 15/063** (2013.01)(73) Assignee: **Flender GmbH**, 46395 Bocholt (DE)(57) **ABSTRACT**(21) Appl. No.: **17/908,154**(22) PCT Filed: **Feb. 5, 2021**(86) PCT No.: **PCT/EP2021/052779**

§ 371 (c)(1),

(2) Date: **Aug. 30, 2022**(30) **Foreign Application Priority Data**

Mar. 19, 2020 (EP) 20164225.3

Publication Classification(51) **Int. Cl.**
H02K 15/04 (2006.01)
H02K 1/16 (2006.01)

In a method for mounting a prefabricated form-wound coil or tooth-wound coil on a layered laminated core to form a stator segment or stator, the form-wound coil or tooth-wound coil is insulated with insulation. Laminates are punched and stacked to form partial laminated cores and/or a laminated core, with the partial laminated cores being spaced apart from one another by spacers and forming substantially axially extending open slots of the laminated core. The form-wound coil or tooth-wound coil are radially inserted into the slots such as to embrace a tooth of the laminated core, and a removable auxiliary element is placed at an axial end face of the laminated core to protect the insulation of the form-wound coil or tooth-wound coil as the form-wound coil or tooth-wound coil is radially inserted into the slots. The auxiliary element is radially removed and repositioned on a further tooth of the laminated core.

