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### (54) STATOR CORE, STATOR, ROTARY ELECTRIC MACHINE, AND METHOD OF MANUFACTURING STATOR CORE

## (71) Applicants: Sumitomo Electric Industries, Ltd., Osaka-shi, Osaka (JP); Sumitomo Electric Sintered Alloy, Ltd., Takahashi-shi, Okayama (JP)

(72) Inventors: **Tatsuya SAITO**, Osaka-shi, Osaka (JP); Tomoyuki UENO, Osaka-shi, Osaka

(73) Assignees: Sumitomo Electric Industries, Ltd., Osaka-shi, Osaka (JP); Sumitomo Electric Sintered Alloy, Ltd., Takahashi-shi, Okayama (JP)

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#### (57)ABSTRACT

A stator core configured to have a plurality of teeth each including a peripheral surface and a first end surface, wherein each of the plurality of teeth is formed of a dust core, the dust core includes a plurality of coated particles, and each of the plurality of coated particles includes a metallic particle and an electrically insulating coating, and wherein each of the first end surfaces has first regions formed of cross sections of the metallic particles and second regions formed of the electrically insulating coatings between the first regions, each of the peripheral surfaces is made of an oxide containing a constituent element of the soft magnetic material, an average thickness of the oxide in each of the peripheral surfaces is 10  $\mu m$  or less, and a difference between a maximum value and a minimum value of a first heights is 0.02 mm or less.

