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(54) **ELECTRIC MACHINE END WINDING
DESIGN WITHOUT CONDUCTOR OVERLAP**

(52) **U.S. Cl.**
CPC **H02K 3/28** (2013.01)

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(57) **ABSTRACT**

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An electric machine includes a stator core defining slots having a number of radial positions. A winding is disposed in the core and has three phases, each of the phases having at least two parallel paths including hurdle-shaped conductors interconnected to form at least two continuous circuits between a terminal and a neutral. Each of the hurdle-shaped conductors have first and second uprights disposed in a different one of the slots and a bridge connecting between the uprights and extending circumferentially over an end surface of the core, wherein the bridges are stacked one on top of the other such that the winding has upper and lower layers. The bridges have variable thickness such that a number of bridges, at each of the upper and lower layers, extending over one of the slots exceeds the number of radial positions of that slot.

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