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(54) **ELECTRIC MACHINE WITH  
MULTI-TAPERED YOKES**

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**ABSTRACT**

An electric machine includes a plurality of electromagnetic coils arranged circumferentially about the axis of rotation. Each coil defines a trapezoidally-shaped and tapered coil opening. The electric machine also includes a plurality of yokes that extend in an axial direction and a plurality of teeth. At least one of the plurality of yokes is tapered in the axial direction, and at least one tooth extends from each of the plurality of yokes. The plurality of teeth are each tapered in a radial direction to enable the plurality of teeth to fit within a corresponding trapezoidally-shaped and tapered coil opening.

