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MASUKO et al.(10) **Pub. No.: US 2023/0231456 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **ELECTRIC MOTOR, DRIVING DEVICE,
COMPRESSOR, AND AIR CONDITIONER**(52) **U.S. Cl.**CPC **H02K 21/14** (2013.01); **H02K 3/18**
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An electric motor includes a rotor, a stator, and a connection switching unit. The stator includes a stator core including $6 \times n$ (n is an integer equal to or larger than 1) slots, and three-phase coils forming $2 \times n$ magnetic poles. The connection switching unit switches a connection state of the three-phase coils between a first connection state and a second connection state. The three-phase coils include $2 \times n$ U-phase coils, $2 \times n$ V-phase coils, and $2 \times n$ W-phase coils in a coil end. Each coil of the three-phase coils is disposed in two slots across one slot on one end side of the stator core.

