[0004] Accordingly, it would beneficial to improve the flexibility of operation of a switched mode power supply by increasing the amount of control over the electrical power output by a switched mode power supply. For example, increasing the amount of control over the output electrical power may enable structurally identical switched mode power supplies to be utilized in different motor drives.

BRIEF DESCRIPTION

[0005] Certain embodiments commensurate in scope with the originally claimed invention are summarized below. These embodiments are not intended to limit the scope of the claimed invention, but rather these embodiments are intended only to provide a brief summary of possible forms of the invention. Indeed, the invention may encompass a variety of forms that may be similar to or different from the embodiments set forth below.

[0006] A first embodiment describes a motor drive that includes driver circuitry that controls operation of an inverter in the motor drive to output power to a motor, control circuitry that controls operation of the driver circuitry, and a switched mode power supply that supplies electrical power to the driver circuitry, the control circuitry, or both. The switched mode power supply includes a primary coil, in which a primary controller stores electrical energy in the primary coil by selectively connecting the primary coil to a power source, and a secondary coil electrically isolated from the primary coil, in which the secondary coil outputs electrical power based at least in part on the electrical energy stored in the primary coil, in which a secondary controller controls the electrical power supplied to the driver circuitry, the control circuitry, or both by selectively connecting the secondary coil to a power output of the switched mode power supply.

[0006a] A second embodiment describes a method for operating a switched mode power supply, comprising:

selectively connecting a primary coil to a power source to store electrical power in the primary coil;

inducing a first voltage across a first secondary coil using the primary coil, wherein the primary coil and the first second coil are electrically isolated and the induced first voltage is based at least in part on the electrical power stored in the primary coil; and

outputting electrical power from a first power output to a motor drive by selectively connecting the first secondary coil to the first power output.

[0007] ~~A second embodiment describes~~The present disclosure also describes a plurality of motor drives that includes a first motor drive that provides drive power to a first motor at a first power rating, in which the first motor drive comprises a first control module that controls operation of the first motor drive, and a second motor drive that provides drive power to a second motor at a