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(54) **WIRELESS CHARGING AND POWERING OF TOOLS**

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(57) **ABSTRACT**

The present invention relates to wirelessly transferring energy to a cordless power tool to charge a power source, such as a rechargeable battery pack, coupled to the tool, and/or to provide power directly to the tool for operation of the tool. For example, a transmitter transmits a magnetic field, and a receiver receives energy via the magnetic field. When a tool and/or battery pack with the receiver is within the magnetic field, a sensing circuit connected to the receiver recognizes the magnetic field and signals a control circuit to capture energy, via the magnetic field. The energy received by the receiver can then be converted into an electrical current that can be used to supply power to the tool and/or battery pack.