

Title (en)

System and method for communicating over power terminals in cordless dc tools

Title (de)

System und Methode zum Datentransfer gleichstrombetriebener kabelloser Werkzeuge über deren Ladeanschlüsse

Title (fr)

Système et méthode pour communiquer des données concernant un outil à courant continu sans fil par le biais de sa station de rechargement

Publication

EP 1559511 A3 20100505 (EN)

Application

EP 05000887 A 20050118

Priority

- US 76894704 A 20040130
- US 81252104 A 20040330

Abstract (en)

[origin: EP1559511A2] A system and method for unidirectionally or bi-directionally communicating information and data to and from an electronic module housed within a cordless power tool (14), over power terminals (22a,22b) of the cordless power tool, while a battery pack of the tool is removed from the tool. A data transfer device is connected to at least one power terminal of the tool in place of the battery pack. The power terminal is also used for electrically connecting the battery pack to the tool during normal operation of the tool. A voltage supplied by the data transfer device to the tool is sequentially varied between a first level and a second level, in accordance with a predetermined communications protocol, to transmit data from electronic module of the tool to the data transfer device. A voltage signal applied to the electronic module of the tool is sequentially shifted between a first voltage and a second voltage to transmit data from the data transfer device to the tool. Thus, data can be transmitted between the tool and the data transfer device without requiring disassembly of the tool.

IPC 8 full level

B25B 21/00 (2006.01); **B25F 5/00** (2006.01); **B25B 23/14** (2006.01)

CPC (source: EP)

B25B 21/00 (2013.01); **B25B 23/14** (2013.01); **B25F 5/00** (2013.01)

Citation (search report)

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- [Y] US 5945806 A 19990831 - FAULK RICHARD A [US]
- [Y] US 5990659 A 19991123 - FRAENNHAGEN BJOERN G [SE]
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Designated contracting state (EPC)

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Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

EP 1559511 A2 20050803; EP 1559511 A3 20100505; AU 2005200268 A1 20050818; CN 100407216 C 20080730; CN 1651197 A 20050810; JP 2005212097 A 20050811; NZ 537869 A 20051028; TW 200536688 A 20051116; TW I264352 B 20061021

DOCDB simple family (application)

EP 05000887 A 20050118; AU 2005200268 A 20050121; CN 200510006410 A 20050131; JP 2005023696 A 20050131; NZ 53786905 A 20050125; TW 94102395 A 20050127