

Title (en)  
Energized slip ring assembly

Title (de)  
Schleifringanordnung

Title (fr)  
Dispositif de bague collectrice

Publication  
**EP 1643602 B1 20100217 (EN)**

Application  
**EP 04256043 A 20040930**

Priority  
CA 2482681 A 20040928

Abstract (en)  
[origin: EP1643602A1] A slip ring assembly (160) including a slip ring (164) and an electrical contact assembly (166). The slip ring (164) defines a circumference and an electrical contact groove (184) extending around the circumference of the slip ring (164). The electrical contact assembly (166) preferably includes a plurality of electrical contacts (187) spaced around the circumference of the slip ring (164) for engaging the electrical contact groove (184). In addition, an urging mechanism (234) is preferably associated with each of the electrical contacts (187) for urging the electrical contacts (187) toward engagement with the electrical contact groove (184). Finally, a wiper (244) is preferably associated with each of the electrical contacts (187) for extending within the electrical contact groove (184) to inhibit a fluid from passing through the electrical contact groove (184).

IPC 8 full level  
**H01R 39/08** (2006.01); **E21B 17/02** (2006.01); **E21B 47/01** (2012.01)

CPC (source: EP US)  
**E21B 17/028** (2013.01 - EP US); **H01R 39/08** (2013.01 - EP)

Citation (examination)

- DE 4314164 A1 19941103 - SPINNER GMBH ELEKTROTECH [DE]
- GB 926534 A 19630522 - GENEVOISE INSTR PHYSIQUE
- DE 4335859 A1 19950427 - VDO SCHINDLING [DE]
- GB 2018043 A 19791010 - BOSCH GMBH ROBERT

Cited by  
EP2874247A1; EP2874246A1; CN112652930A; CN103628825A; CN113067224A; US9284793B2; WO2013028800A3; US9567827B2; US9759029B2; US9777551B2; US10156120B2; US10633534B2; US10570694B2; US10801298B2; US11634965B2; US10246967B2; US10316617B2; US10508504B2; US10605044B2; US10711563B2; US9970256B2; US10036221B2; US10214981B2; US10605020B2; US11078739B2; US11634958B2; US10480280B2; US10480267B2; US10781659B2; US10907441B2; US11713645B2; US8955605B2; US8997853B2; US9010411B1; US9074439B2; US9097095B2; US9103177B2; US9316086B2; US9334703B2; US9391417B2; US9562416B2; US9631453B2; US9689228B2; US9719320B2; US9725982B2; US9896899B2; US9976382B2; US9985402B2; US10446996B2; US10480277B2; US10494895B2; US10900321B2; US10961796B2; US11008827B2; US11136855B2

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**EP 1643602 A1 20060405; EP 1643602 B1 20100217**; AU 2004216666 A1 20060413; AU 2004216666 B2 20110303; AU 2011200578 A1 20110303; AU 2011200578 B2 20110602; CA 2482681 A1 20060328; CA 2482681 C 20080812; DE 602004025575 D1 20100401

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**EP 04256043 A 20040930**; AU 2004216666 A 20040930; AU 2011200578 A 20110210; CA 2482681 A 20040928; DE 602004025575 T 20040930