



(43) International Publication Date  
21 April 2016 (21.04.2016)

(10) International Publication Number  
**WO 2016/059228 A3**

(51) International Patent Classification:

*A61B 18/18* (2006.01) *A61B 1/00* (2006.01)  
*H01P 1/06* (2006.01) *A61B 1/012* (2006.01)

(21) International Application Number:

PCT/EP2015/074047

(22) International Filing Date:

16 October 2015 (16.10.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1418486.5 17 October 2014 (17.10.2014) GB

(71) Applicant: **CREO MEDICAL LIMITED** [GB/GB];  
Riverside Court, Beaufort Park, Chepstow, Chepstow  
Monmouthshire NP16 5UH (GB).

(72) Inventors: **HANCOCK, Christopher Paul**; 37 Napier  
Road, Bath Bath and North East Somerset BA1 4LN (GB).  
**WHITE, Malcolm**; Creo Medical Limited, Riverside  
Court, Beaufort Park, Chepstow Monmouthshire NP16  
5UH (GB). **ULLRICH, George Christian**; UW Designs  
Ltd, 2 Pen Y Bonc, Caernarfon Road, Bangor Gwynedd  
LL57 4DB (GB). **WEBB, David Edward**; UW Designs  
Ltd, 2 Pen Y Bonc, Caernarfon Road, Bangor Gwynedd  
LL57 4DB (GB). **TURNER, Louis**; Creo Medical Lim-  
ited, Riverside Court, Beaufort Park, Chepstow Mon-  
mouthshire NP16 5UH (GB). **MORRIS, Steven**; Creo  
Medical Limited, Riverside Court, Beaufort Park, Chep-  
stow Monmouthshire NP16 5UH (GB).

(74) Agents: **JOHNSON, Richard** et al.; Mewburn Ellis LLP,  
City Tower, 40 Basinghall Street, London Greater London  
EC2V 5DE (GB).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,  
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,  
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,  
HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,  
KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,  
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,  
PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC,  
SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,  
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

[Continued on next page]

(54) Title: CABLE FOR CONVEYING RADIOFREQUENCY AND/OR MICROWAVE FREQUENCY ENERGY TO AN ELEC-  
TROSURGICAL INSTRUMENT

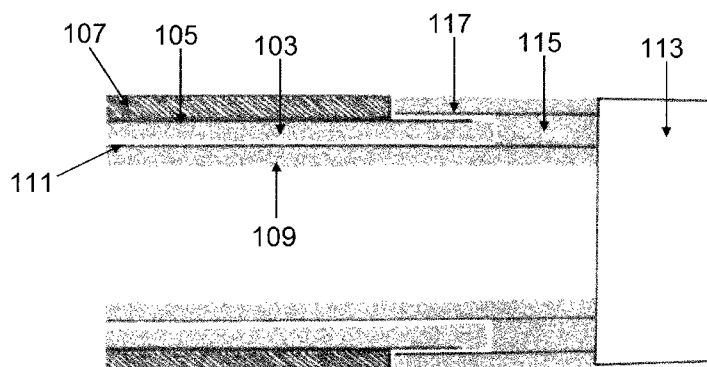


FIG. 14

(57) Abstract: Embodiments of the invention provide a hollow cable for conveying radiofrequency and/or microwave frequency energy to an electrosurgical instrument that can fit within, e.g. slide relative to, the hollow cable. The hollow cable provides a bipolar electrical connection to the electrosurgical instrument that is maintained when the electrosurgical instrument is rotated relative to the hollow cable. The cable may comprise a hollow coaxial transmission line having a rotatable component mounted at its distal end. The rotatable component comprises a longitudinal passageway continuous with the hollow coaxial transmission line. The rotatable component is rotatable relative to the transmission line and comprises a first and second conductive portions that are respectively electrically connected first and second terminals on the coaxial transmission line and which are configured to maintain an electrical connection with their respective terminal when rotated relative to the coaxial transmission line.



WO 2016/059228 A3



**(84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report (*Art. 21(3)*)
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (*Rule 48.2(h)*)

**(88) Date of publication of the international search report:**

9 June 2016

**Declarations under Rule 4.17:**

- of inventorship (*Rule 4.17(iv)*)