

Title (en)

DEVICES AND METHODS FOR MINIMALLY INVASIVE SUTURING

Title (de)

VORRICHTUNG UND VERFAHREN FÜR MINIMAL-INVASIVES CHIRURGISCHES NÄHEN

Title (fr)

DISPOSITIFS ET PROCÉDÉS DE SUTURE MINIMALEMENT INVASIVE

Publication

EP 2741680 A4 20150708 (EN)

Application

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Abstract (en)

[origin: WO2013022959A2] Devices and methods for minimally invasive suturing are disclosed. One suturing device for minimally invasive suturing includes a proximal section a distal end, and an intermediate region therebetween. The device includes a suture head assembly having a suturing needle with a pointed end and a second end. The suturing needle is capable, of rotating about an axis approximately perpendicular to a longitudinal axis of the device, wherein the pointed end of the suturing needle is positioned within the suture, head assembly prior to deployment of guides that are adapted and configured to guide the needle around a circular path when advanced by a drive mechanism having a needle driver for engaging and rotating the suturing needle.

IPC 8 full level

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Citation (search report)

- [XA] US 2010130990 A1 20100527 - SALIMAN JUSTIN D [US]
- [X] US 6056771 A 20000502 - PROTO GEORGE R [US]
- [X] US 4957502 A 19900918 - TAKASE HARUO [JP]
- [A] US 2010049219 A1 20100225 - CRONIN JAMES [US], et al
- See references of WO 2013022959A2

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