



US009510882B2

(12) **United States Patent**
Dell'Oca

(10) **Patent No.:** **US 9,510,882 B2**

(45) **Date of Patent:** **Dec. 6, 2016**

(54) **GROOVED CRIMP WITH A SET SCREW**

(71) Applicant: **DePuy Synthes Products, Inc.**,
Raynham, MA (US)

(72) Inventor: **Alberto A. Fernandez Dell'Oca**,
Montevideo (UY)

(73) Assignee: **DEPUY SYNTHES PRODUCTS, INC.**,
Raynham, MA (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 132 days.

(21) Appl. No.: **14/602,896**

(22) Filed: **Jan. 22, 2015**

(65) **Prior Publication Data**

US 2015/0133939 A1 May 14, 2015

Related U.S. Application Data

(63) Continuation of application No. 12/521,842, filed as
application No. PCT/US2008/055226 on Feb. 28,
2008, now Pat. No. 8,968,318.

(60) Provisional application No. 60/903,823, filed on Feb.
28, 2007.

(51) **Int. Cl.**

A61B 17/82 (2006.01)

A61B 17/86 (2006.01)

A61B 17/84 (2006.01)

A61B 17/56 (2006.01)

(52) **U.S. Cl.**

CPC **A61B 17/82** (2013.01); **A61B 17/86**
(2013.01); **A61B 17/842** (2013.01); **A61B**
2017/564 (2013.01)

(58) **Field of Classification Search**

CPC A61B 17/82; A61B 17/842; A61B 17/86;
A61B 2017/564

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,239,900	A	3/1966	Bottoms
4,966,600	A	10/1990	Songer et al.
5,190,545	A	3/1993	Corsi et al.
5,318,566	A	6/1994	Miller
5,324,291	A	6/1994	Reis et al.
5,395,374	A	3/1995	Miller et al.
5,415,658	A	5/1995	Kilpela et al.
5,423,820	A	6/1995	Miller et al.

(Continued)

FOREIGN PATENT DOCUMENTS

EP	19062	11/1980
FR	543126	8/1922

(Continued)

Primary Examiner — Samuel Hanna

(74) *Attorney, Agent, or Firm* — Fay Kaplun & Marcin,
LLP

(57) **ABSTRACT**

A device for binding a cable about a fractured bone to stabilize a fracture includes a slot including a distal opening sized to receive an enlarged end of a cable and a proximal opening sized to permit the cable to slide therethrough while preventing the enlarged end from passing therethrough and a bore sized to slidably receive the cable, the bore extending to a proximal opening in combination with a locking element channel extending to a distal end opening into the bore and a locking element movable into a locking position in which a distal end of the locking element extends into the bore to engage a portion of the cable received therein and lock the cable in a desired position within the bore.

12 Claims, 9 Drawing Sheets

