

(12) **United States Patent**  
**Seegert et al.**

(10) **Patent No.:** **US 9,408,750 B2**  
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **REDUCED-PRESSURE TREATMENT SYSTEMS AND METHODS EMPLOYING DEBRIDEMENT MECHANISMS**

(75) Inventors: **Charles Alan Seegert**, North Richland, TX (US); **Robert Peyton Wilkes**, San Antonio, TX (US)

(73) Assignee: **KCI Licensing, Inc.**, San Antonio, TX (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1052 days.

(21) Appl. No.: **13/462,817**

(22) Filed: **May 3, 2012**

(65) **Prior Publication Data**

US 2012/0220924 A1 Aug. 30, 2012

**Related U.S. Application Data**

(63) Continuation of application No. 12/639,351, filed on Dec. 16, 2009, now Pat. No. 8,486,032.

(60) Provisional application No. 61/140,654, filed on Dec. 24, 2008.

(51) **Int. Cl.**

**A61M 37/00** (2006.01)  
**B23P 17/04** (2006.01)

(Continued)

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

CPC ..... **A61F 13/00068** (2013.01); **A61B 17/32** (2013.01); **A61F 13/00063** (2013.01);  
(Continued)

(58) **Field of Classification Search**

CPC ..... **A61M 37/00**; **B23P 17/04**  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,355,846 A 10/1920 Rannells  
2,547,758 A 4/1951 Keeling  
(Continued)

FOREIGN PATENT DOCUMENTS

AU 550575 A1 3/1986  
AU 745271 4/1999  
(Continued)

OTHER PUBLICATIONS

N.A. Bagautdinov, "Variant of External Vacuum Aspiration in the Treatment of Purulent Diseases of the Soft Tissues," Current Problems in Modern Clinical Surgery: Interdepartmental Collection, edited by V. Ye Volkov et al. (Chuvashia State University, Cheboksary, U.S.S.R. 1986);pp. 94-96 (certified translation).

(Continued)

*Primary Examiner* — Philip R Wiest

*Assistant Examiner* — Sara Sass

(57) **ABSTRACT**

Reduced-pressure treatment systems and methods are disclosed that employ debridement mechanisms to remove unwanted tissue. In one instance, a reduced-pressure treatment system for treating a tissue site on a patient includes a manifold member for distributing reduced pressure to the tissue site, a support member for disposing proximate the tissue site and the manifold, and a debridement mechanism coupled to the support member. The debridement mechanism is for debriding the tissue site. The system further includes a sealing drape for placing over the tissue site and manifold member. The sealing drape is operable to form a fluid seal over the tissue site and manifold member. The system also includes a reduced-pressure subsystem for delivering a reduced pressure to the sealing drape. The system may further include a chemical-debridement subsystem. Other systems, manifolds, and methods are disclosed.

**17 Claims, 5 Drawing Sheets**

