

## (12) United States Patent

### Rutledge et al.

### (54) SUCKER ROD APPARATUS AND METHOD

(76) Inventors: Russell P. Rutledge, Big Spring, TX (US); Russell P. Rutledge, Jr., Big Spring, TX (US); Ryan B. Rutledge,

Big Spring, TX (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 606 days.

(21) Appl. No.: 13/136,715

(22)Filed: Aug. 9, 2011

#### (65)**Prior Publication Data**

US 2013/0039692 A1 Feb. 14, 2013

(51) **Int. Cl.** E21B 43/00 (2006.01)F16B 7/00 (2006.01)F04B 53/14 (2006.01)E21B 17/10 (2006.01)(2006.01)F04B 47/02 B29C 65/00 (2006.01)B29C 65/54 (2006.01)B29C 65/48 (2006.01)B29L 31/06 (2006.01)

(52) U.S. Cl.

CPC ..... F04B 53/14 (2013.01); B29C 66/5261 (2013.01); B29C 65/542 (2013.01); E21B 17/1071 (2013.01); B29C 65/4835 (2013.01); B29C 66/53 (2013.01); B29L 2031/06 (2013.01); B29C 66/721 (2013.01); F04B 47/02 (2013.01); B29C 66/1246 (2013.01); B29C 66/12441 (2013.01)

### US 8,851,162 B2 (10) Patent No.: Oct. 7, 2014

(45) **Date of Patent:** 

USPC ...... 166/68; 166/105; 403/265; 403/268 Field of Classification Search See application file for complete search history.

#### (56)**References Cited**

### U.S. PATENT DOCUMENTS

4,360,288	A	11/1982	Rutledge et al.
4,401,396	A	8/1983	McKay
4,475,839	A	10/1984	Strandberg
4,653,953	A	3/1987	Anderson et al.
4,662,774	A	5/1987	Morrow, Jr.
4,822,201	A	4/1989	Iwasaki et al.
4,919,560	A	4/1990	Rutledge et al.
5,253,946	A	10/1993	Watkins
6,193,431	В1	2/2001	Rutledge
7,730,938	B2	6/2010	Rutledge
. , ,	B2	7/2011	Rutledge
8,062,463	B2	11/2011	Rutledge et al.
8,113,277	B2	2/2012	Rutledge et al.
8,500,943	B2	8/2013	Rutledge

### OTHER PUBLICATIONS

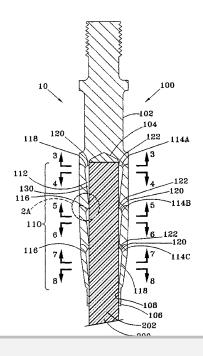
PCT search report for PCT/US12/00347 dated Nov. 29, 2012 (26 pages).

Primary Examiner — Giovanna Wright

### ABSTRACT

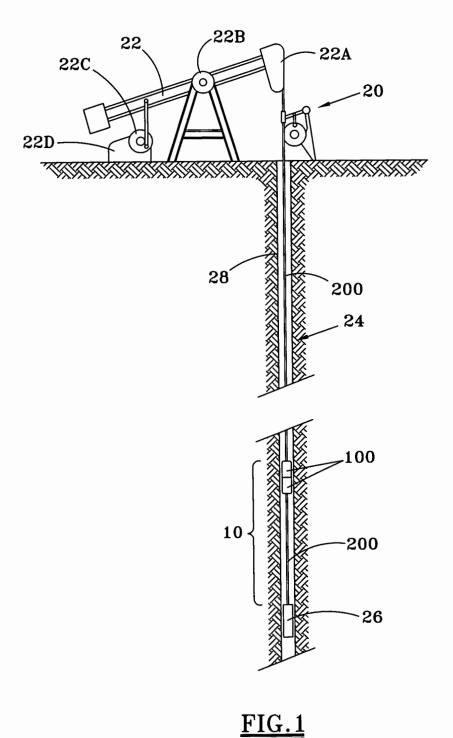
The present disclosure relates to a fiberglass rod with connectors on each end. Each connector has a rod-receiving receptacle having an open end, a closed end, and axially spaced annular wedge shaped surfaces such that the compressive forces between the rod and the respective connector are defined by the shape of the wedged surfaces.

### 40 Claims, 5 Drawing Sheets

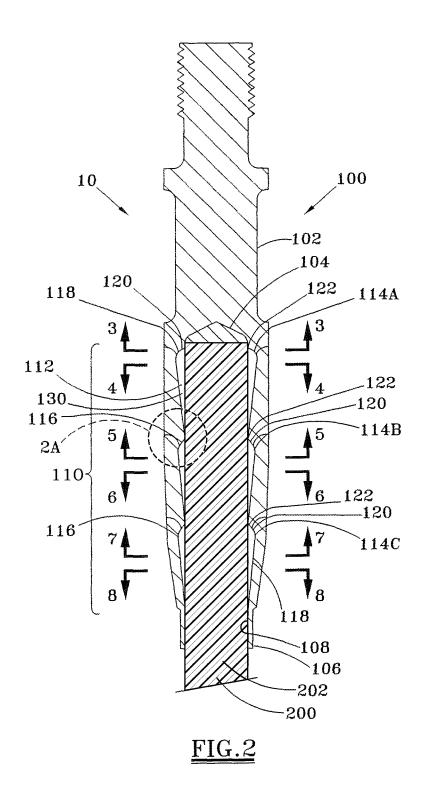


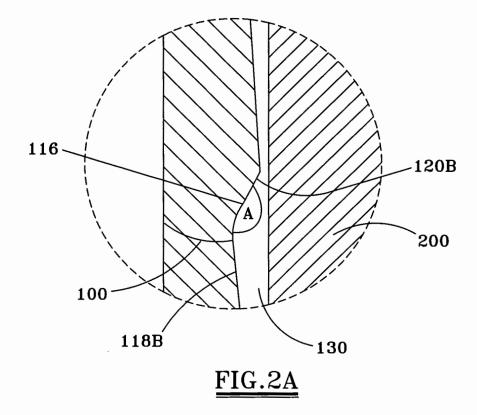
Pet'rs Exhibit 1001











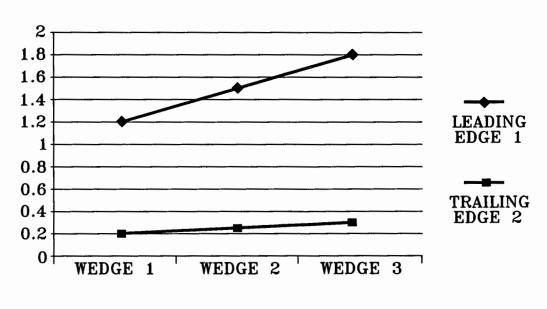
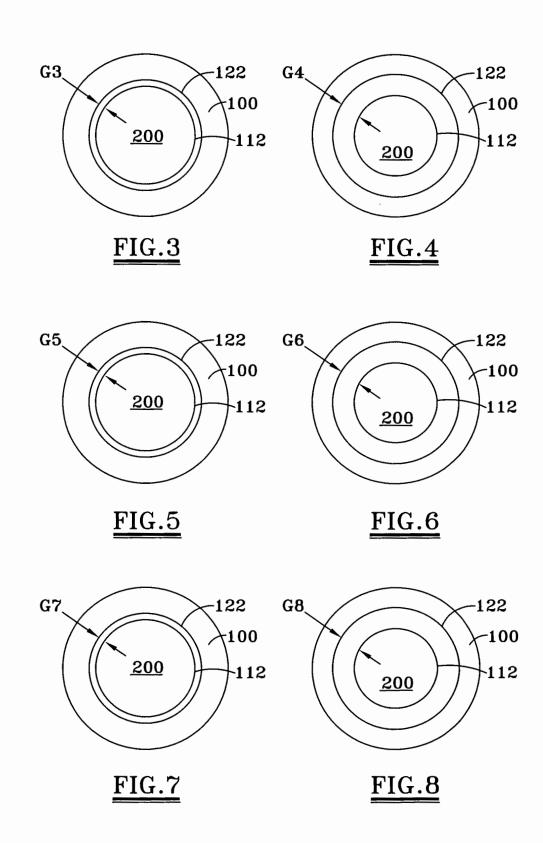


FIG.9

Oct. 7, 2014





# DOCKET A L A R M

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

