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Rutledge et al.

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(54) **SUCKER ROD APPARATUS AND METHOD**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 606 days.

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(51) **Int. Cl.**
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F16B 7/00 (2006.01)
F04B 53/14 (2006.01)
E21B 17/10 (2006.01)
F04B 47/02 (2006.01)
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)

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

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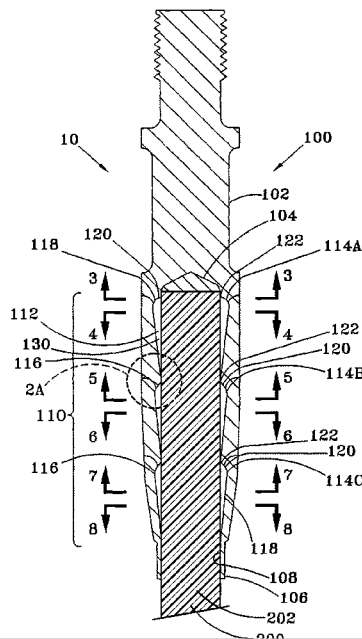
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Primary Examiner — Giovanna Wright

(57) **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



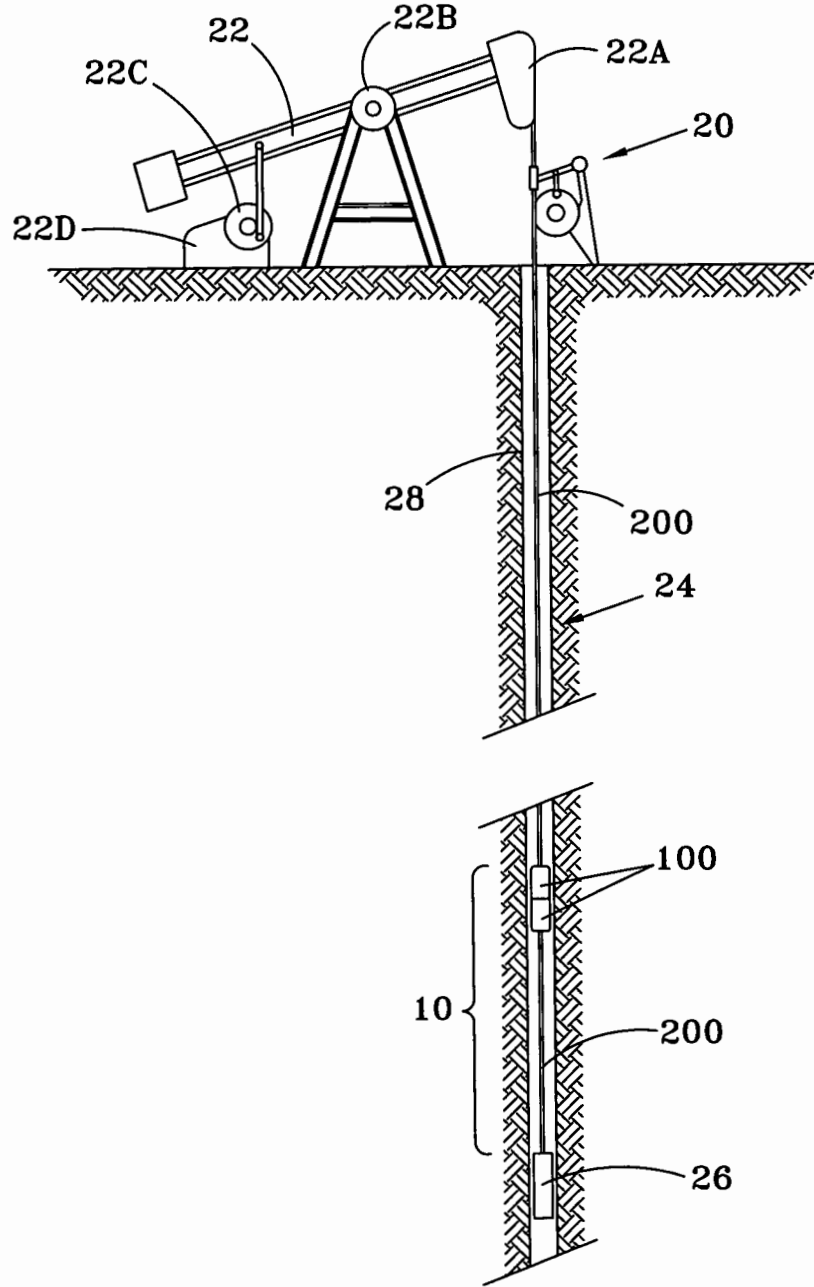


FIG. 1

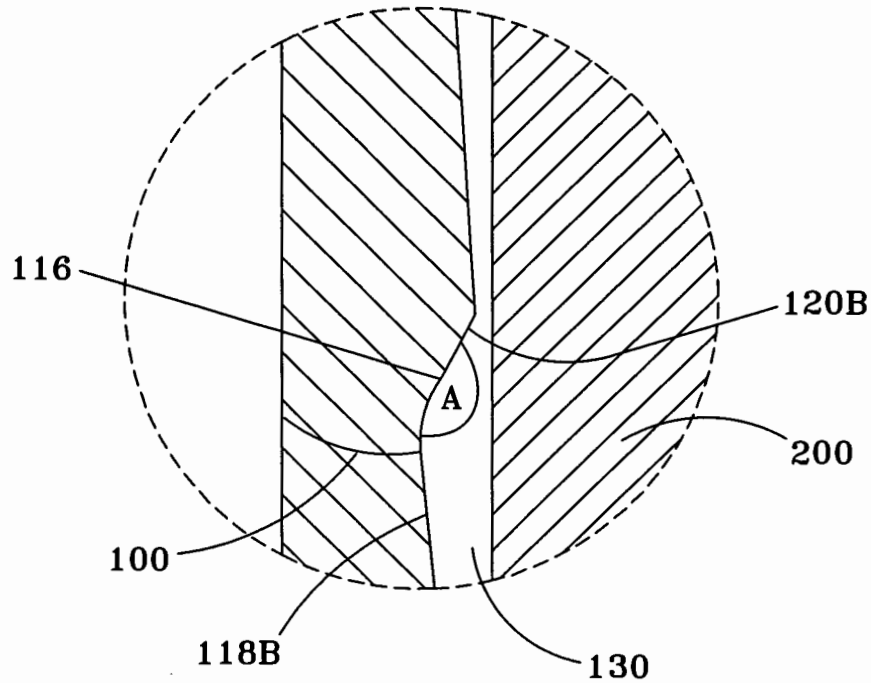


FIG. 2A

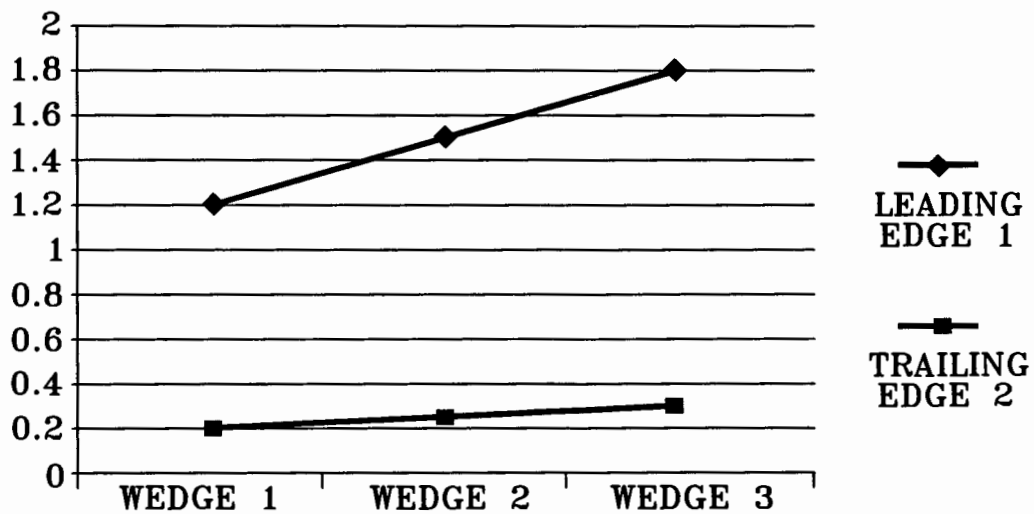


FIG. 9

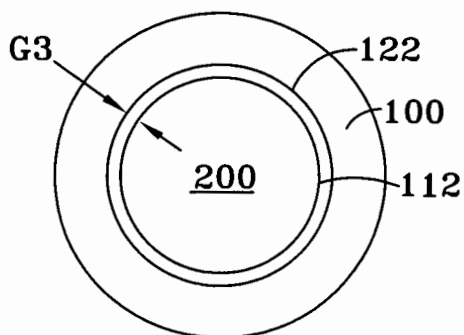


FIG. 3

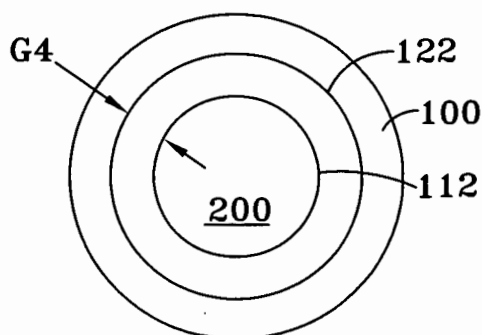


FIG. 4

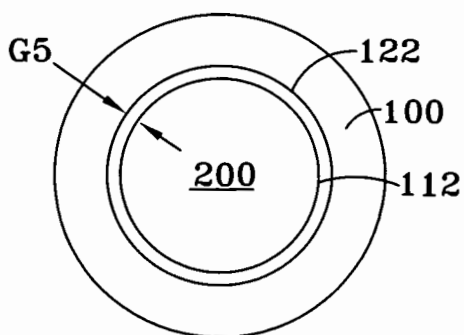


FIG. 5

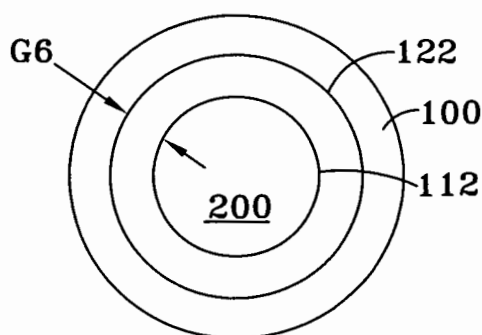


FIG. 6

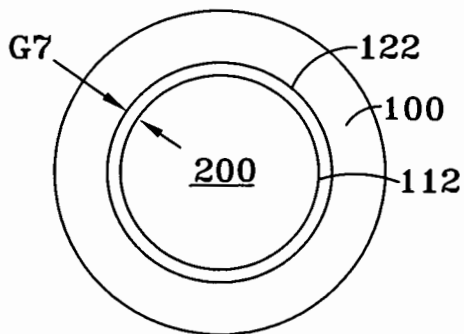


FIG. 7

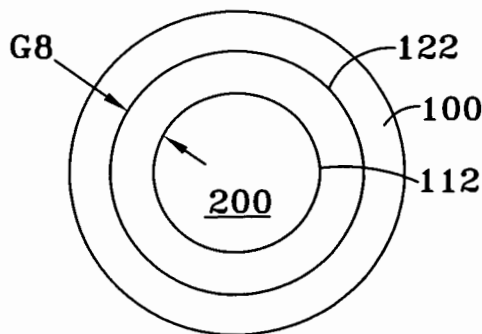


FIG. 8

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