

(12) **United States Patent**
Rutledge, Sr. et al.

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(54) **SUCKER ROD END FITTINGS AND METHOD OF USING SAME**

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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 352 days.

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(51) **Int. Cl.**
E21B 17/02 (2006.01)

(52) **U.S. Cl.** **166/242.6**; 166/68

(58) **Field of Classification Search** 166/105, 166/242.6, 378, 380; 403/265, 268, 361
See application file for complete search history.

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Primary Examiner — Jennifer H Gay

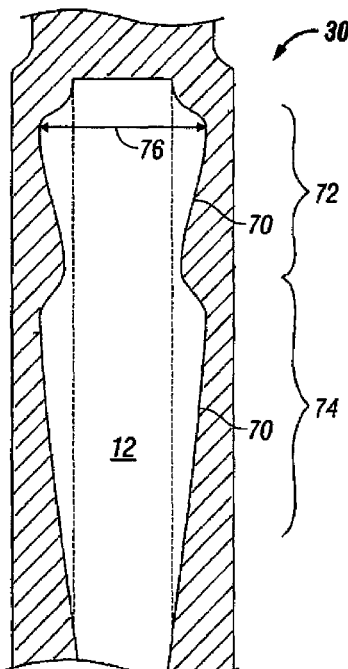
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(57) **ABSTRACT**

An end fitting for sucker rods or continuous sucker rods defines a rod receptacle with an interior surface defining void spaces having an axial radius of curvature of at least twenty inches. In one form, the fitting receptacle defines two such void spaces and the radius of curvature differs between them.

7 Claims, 4 Drawing Sheets



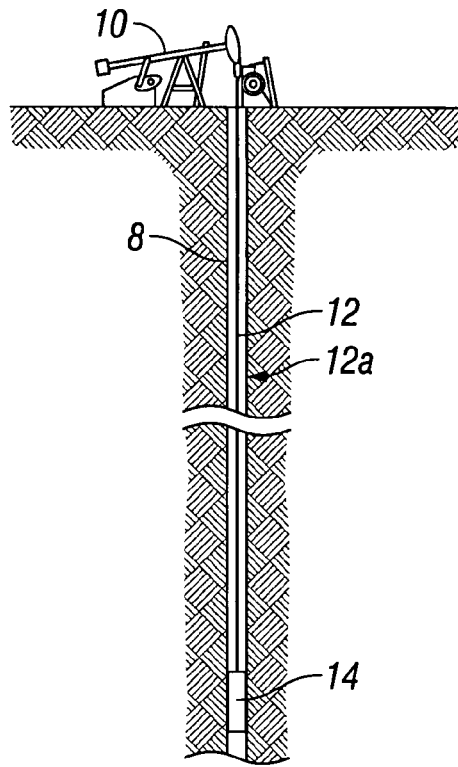


FIG. 1

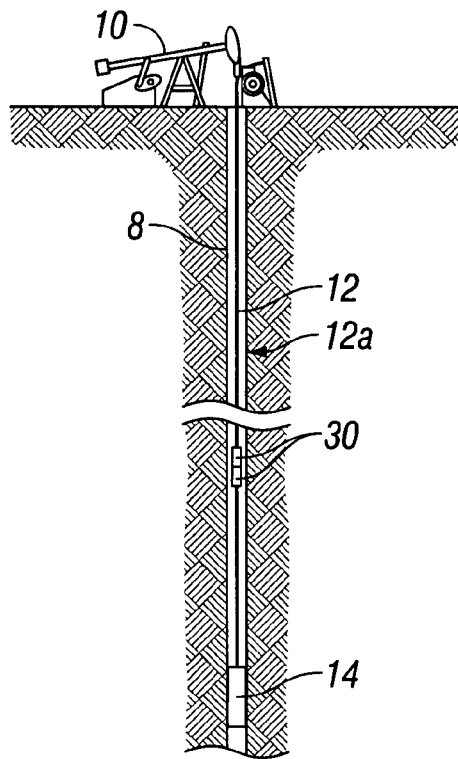


FIG. 1

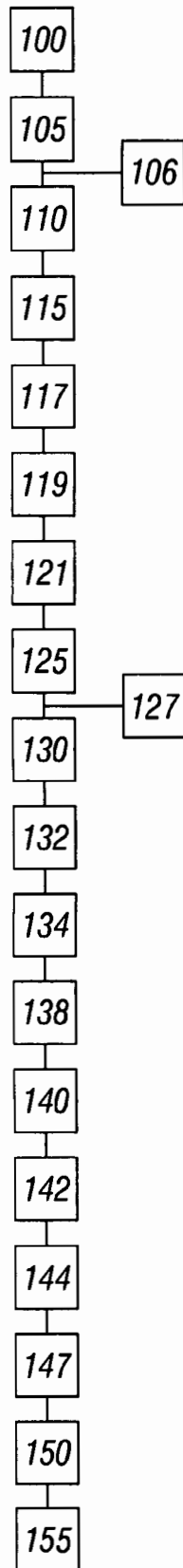


FIG. 2

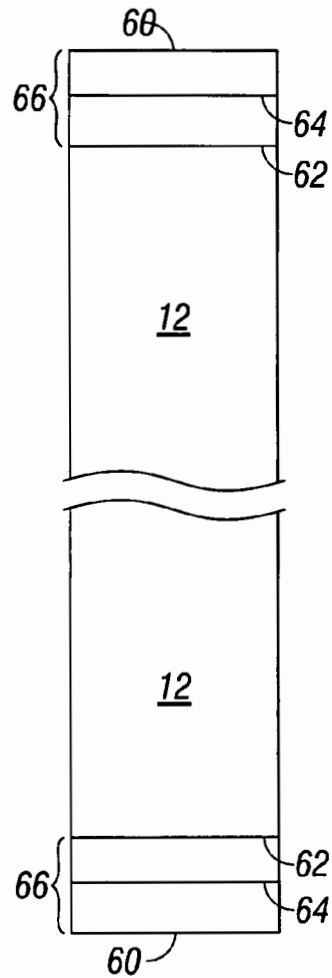


FIG. 3

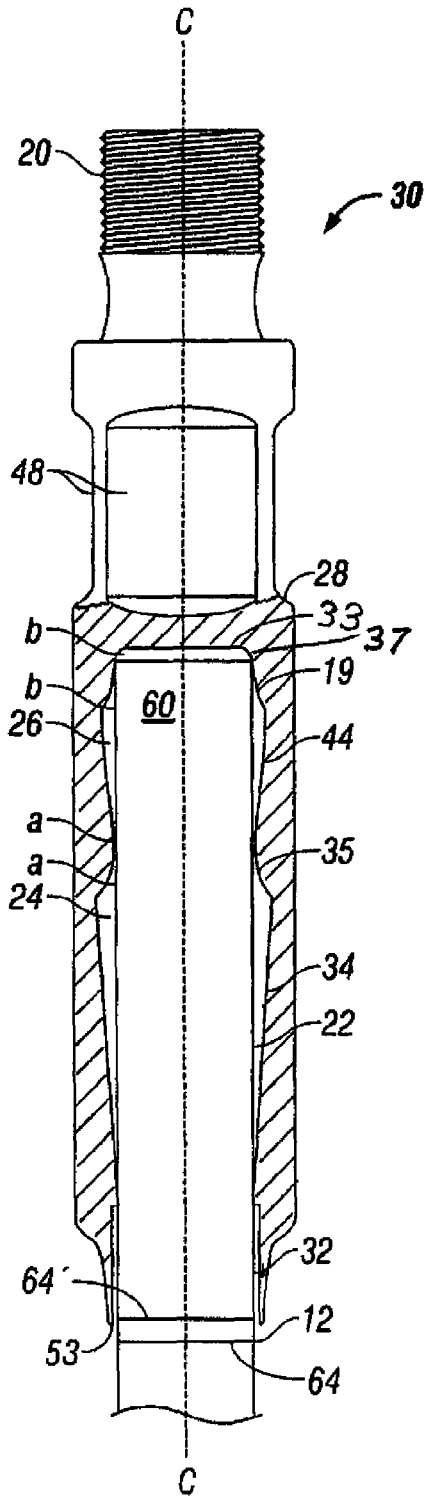


FIG. 4

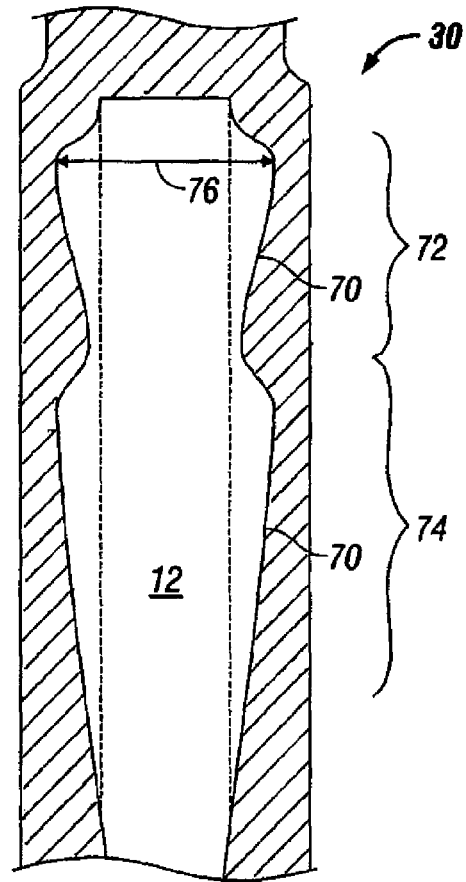


FIG. 4A

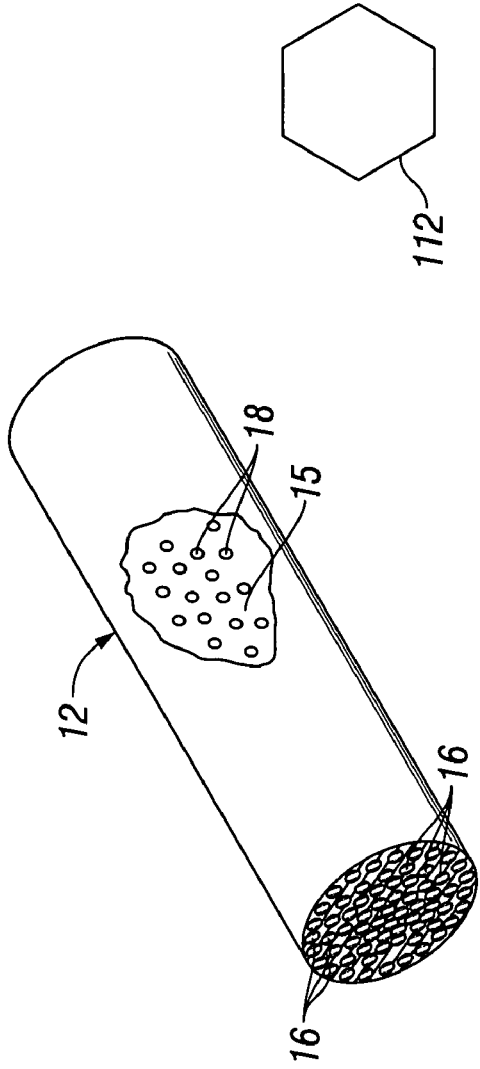


FIG. 5

FIG. 5A

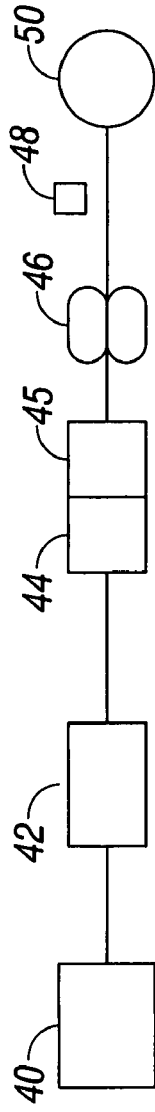


FIG. 6

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