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Martini

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(54) **RECIPROCATING ROTARY DRILLING MOTOR**

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(51) **Int. Cl.**⁷ **E21B 1/12**

(57) **ABSTRACT**

(52) **U.S. Cl.** **175/57; 175/92; 173/73**

An improved downhole fluid pressure powered reciprocating rotary drilling motor includes an automatic fluid valve means and a fluid controller that in combination provide a fluid driven periodic forcing function to excite a drill bit both axially and rotationally for enhanced drill bit penetration in oil well work-over and oil well open hole earth borings on both rotating and non-rotating drill strings.

(58) **Field of Search** 175/57, 92, 97, 175/106; 173/73, 59, 91, 93.5, 93.6, 100, 104

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16 Claims, 3 Drawing Sheets

