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(54) Title: NON-MAGNETIC CORROSION RESISTANT HIGH STRENGTH STEELS

$$\frac{\text{Nickel equivalence}}{\text{Chromium equivalence minus 14}} > 1.51 \qquad \text{(I)}$$

(57) Abstract

A non-magnetic corrosion and galling resistant high strength steel suitable for use as non-magnetic components in directional drilling of oil and gas wells whose composition by weight includes: carbon up to 0.2 %; silicon up to 1.0 %; manganese from 10.0 to 20.0 % chromium from 13.5 to 18.0 %; nickel from 1.0 to 7.0 %; molybdenum from 1.5 to 4.0 %; and nitrogen from 0.2 to 0.4 %, the composition satisfying the formulae: (i) and (ii): nickel equivalence + chromium equivalence > 35