

Abstract

CASING BIT AND CASING REAMER DESIGNS

A casing end tool has a bowl-like (or cup-like) body defined by a wall having an outer convex surface and an inner concave surface opposite of the outer convex surface. The bowl-like body has a center axis. The inner concave surface is non-axisymmetric with respect to the center axis, while the outer convex surface is axisymmetric with respect to the center axis. The non-axisymmetric configuration is provided in one implementation through the presence of a set of raised boss or land structures formed on the inner concave surface. In another implementation, the non-axisymmetric configuration is provided by channels formed in the inner concave surface.

[Figure 1]