

CASING FRIENDLY, SHEARABLE HARDBANDS AND SYSTEMS AND METHODS FOR SHEARING SAME

ABSTRACT

A tool joint comprises a body having a central axis, a first end, and a second end opposite the first end, wherein the body is made of a first material having a first hardness. In addition, the tool joint comprises an annular hardband disposed about the body. The hardband is made of a second material. The second material comprises a base material and a plurality of discrete pellets dispersed throughout the base material. The base material has a second hardness and the pellets have a third hardness. The second hardness is substantially the same as the first hardness. The third hardness is greater than the second hardness and less than the hardness of tungsten carbide.

Figure 11