ABSTRACT

PACKER APPARATUS

A packer apparatus (10) for sealing the annulus between a tubing string (11) and a casing (13) disposed in a wellbore (12), comprises a packer mandrel (35) adapted to be connected in the tubing string (11); an expandable seal assembly (90) disposed about an outer surface (86) of said packer mandrel (35), said packer apparatus (10) having a running position (25) and a set position (30), wherein said seal assembly (90) and said casing (13) have an annular gap (95) therebetween when said packer (10) is in said running position (25) and wherein said seal assembly (90) sealingly engages said casing (13) when said packer (10) is in said set position (30); an upper seal wedge (200) disposed about said packer mandrel (35), said upper seal wedge (200) being positioned above said seal assembly (90) when said seal assembly (90) is in said running position (25); and a lower seal wedge (202) disposed about said packer mandrel (35), said lower seal wedge (202) being positioned below said seal assembly (90) when said packer apparatus (10) is in said running position (25), wherein said upper and lower seal wedges (200, 202) slide between at least a portion of said seal assembly (90) and said packer mandrel outer surface (86) to radially expand said seal assembly (90) outwardly into sealing engagement with said casing (13) when said packer apparatus (10) is moved from said running (25) to said set position (30). The packer apparatus may further comprise first and second anti-extrusion jackets (117) to prevent sealing element extrusion when the packer apparatus (10) is in the set position (30).

FIG. 2C.

This Sheet Has Been Replaced

