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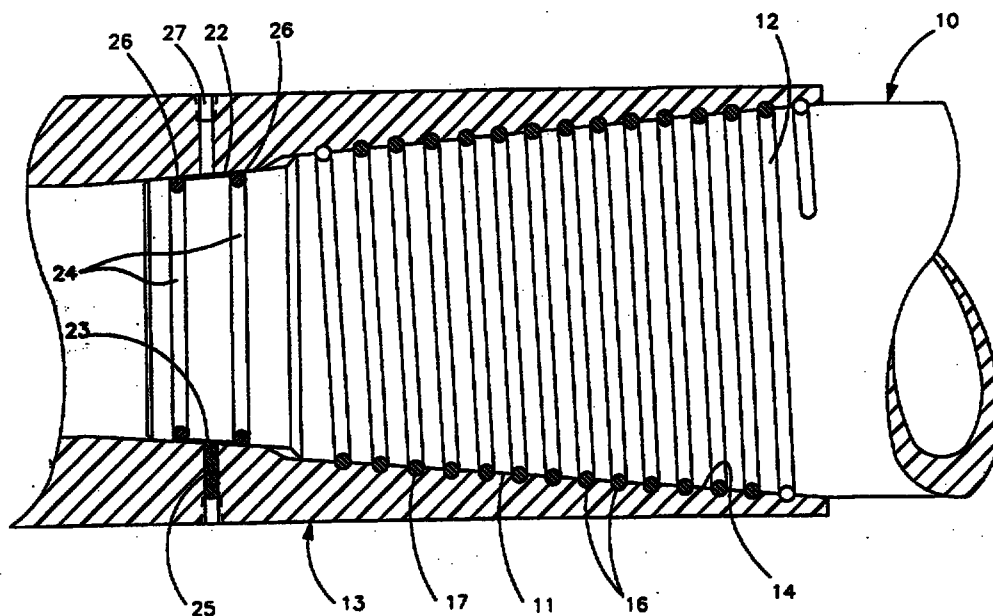
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(54) Title: **HIGH-PRESSURE FIBER REINFORCED COMPOSITE PIPE JOINT**



(57) Abstract

A pipe joint for fiber reinforced composite pipe (10, 13) has internal and external matching tapers (11, 14) with a low taper angle. A half round helical groove (16) is formed in each of the internal and external tapers (11, 14) for receiving several turns of a ductile key (17). Deformation of the key (17) in shear redistributes longitudinal loads along the length of the pipe joint. The outer member of the pipe joint (13) has a high stiffness so that internal pressure in the pipe presses the tapered surfaces (11, 14) together so that the resulting friction enhances the longitudinal load carrying capability of the joint. High external stiffness may be provided by winding the external moiety of the joint with high modulus of elasticity fiber.