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(54) Title: DRILL BIT NOZZLE AND METHOD OF ATTACHMENT ✓

(57) Abstract

A fluid nozzle (11) for threaded insertion into a drill bit (10). The nozzle (11) is equipped with a drive head (21) that receives a socket-type torquing tool (25). The torque forces exerted by the tool compress the drive head, permitting larger torque forces to be exerted on the nozzle. Use of a compressive drive structure permits the use of less material, which in turn permits a larger flow passage to be formed through the nozzle for a given nozzle size. The facets (22, 23 and 24) of the drive area may be inclined relative to the nozzle axis to limit the torque force applied by a drive tool. When the torque force exceeds a limit determined by the configuration and inclination of the facets, the tool is forced axially off of the drive area.

