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(54) Title: APPARATUS AND METHOD FOR PERFORATING AND STIMULATING A SUBTERRANEAN FORMATION

(57) Abstract

A method and apparatus for perforating and stimulating a subterranean formation (16) which is penetrated by a well bore (10) having casing positioned therein so as to establish fluid communication between the formation and the well bore. Substantially rigid, flexible, or liquid propellant (20) is interposed between the casing (12) and at least one shaped charge (40) in a subterranean well bore and is ignited due to the shock, heat and/or pressure generated from the detonated charge. Upon burning, the propellant material generates gases which clean perforations formed in the formation by detonation of the shaped charge(s) and which extend fluid communication between the formation and the well bore.

