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(54) **Title:** WIRELESS DETONATORS WITH STATE SENSING, AND THEIR USE

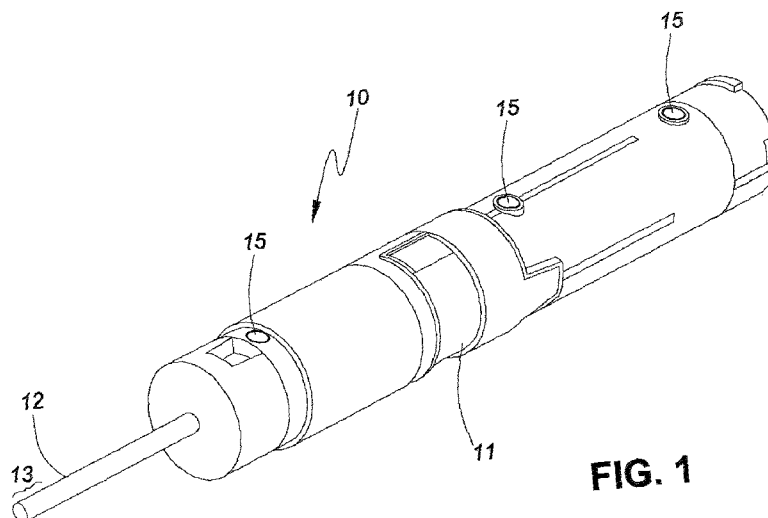


FIG. 1

(57) **Abstract:** Wireless detonator systems present opportunities for controlled blasting of rock without the encumbrances of physical wired connections at the blast site. Disclosed herein are wireless detonator assemblies, which sense the state of environmental condition(s) of their immediate vicinity, and which are active to receive and / or process a command signal to FIRE only if the environmental condition(s) are deemed suitable or appropriate according to predetermined parameters. Also disclosed are improved methods of blasting involving such wireless detonator assemblies, as well as corresponding wireless electronic primers.

