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(54) Title: SYSTEMS AND METHODS FOR DETERMINING WATER DEPTH AND EXPLOSIVE DEPTH IN BLASTHOLES

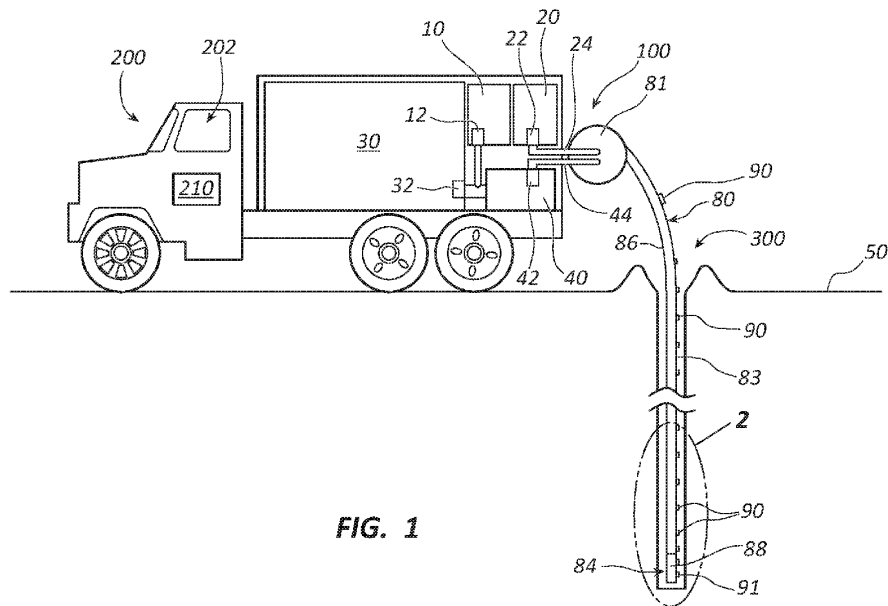


FIG. 1

(57) Abstract: An explosive delivery system for dipping and loading a blasthole to determine water depth and explosive depth in blasthole. The explosive delivery system includes a vehicle with a first reservoir configured to store an explosive and a delivery apparatus reel mounted to the vehicle with a delivery apparatus stored on the delivery apparatus reel. The delivery apparatus having a central bore that extends a length of the delivery apparatus from a proximal end to a distal end of the delivery apparatus and an outlet disposed at the distal end. The explosive delivery apparatus is configured to deliver the explosive out of the outlet of the delivery apparatus. The delivery apparatus includes a plurality of level sensors disposed on an outer surface of the delivery apparatus and that are dispersed along the delivery apparatus. Each of the level sensors is configured to determine if it is disposed in water, air, or explosive.

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