



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : F42D 1/08, 1/18, 1/22, 3/04, 5/045, F42B 3/26	A1	(11) International Publication Number: WO 00/36364 (43) International Publication Date: 22 June 2000 (22.06.00)
(21) International Application Number: PCT/AU99/01107 (22) International Filing Date: 14 December 1999 (14.12.99) (30) Priority Data: PP 7699 14 December 1998 (14.12.98) AU 60/134,438 17 May 1999 (17.05.99) US (71) Applicant (for all designated States except US): ROCKTEK LTD. [AU/AU]; Lot 333 Harries Way, Pinjarra, W.A. 6208 (AU). (72) Inventors; and (75) Inventors/Applicants (for US only): GAVRILOVIC, Mihailo [US/US]; 17301 West Colfax Avenue, Suite 170, Golden, CO 80401 (US). MICKE, Brian [US/US]; 22910 Pinecres Road, Golden, CO 80401 (US). (74) Agent: MIZZI, Anthony, Paul; Griffith Hack, Level 6, 256 Adelaide Terrace, Perth, W.A. 6000 (AU).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report.
(54) Title: METHOD AND APPARATUS FOR CHARGING A HOLE		
(57) Abstract A method of charging hole (12) drilled in rock or concrete (10), the method including inserting a quantity of energetic material (14) on or near the bottom (16) of hole (12). Lead (28) connects initiator (18) with an initiation source at ground level. Hole (12) is filled with stemming material (20) to a level (L) and plug (22) is positioned to rest on stemming material (20). Lead (28) threads through plug (22) via a slot, recess or passage. Mass (30) such as the bucket of excavator (32) and plug (22) prevent stemming material (20) from being blown out of hole (12) when energetic material (14) is detonated. The risk of collar area (C) being fragmented and energised to produce fly rock is reduced since the length of plug (22) is commensurate with the length of collar area (C). Plug (22) and stemming material (20) can be replaced by a stemming bar, with the stemming bar attached directly to energetic material (14).		