Title (en)

METHOD OF BREAKING SLABS AND BLOCKS OF ROCK FROM ROCK FORMATIONS AND EXPLOSIVE SHOCK TRANSMITTING AND MODERATING COMPOSITION FOR USE THEREIN

Title (de)

SPRENGSTOFF MIT SCHOCK ABSORBIERENDEM GEL

Title (fr)

PROCEDE DE RUPTURE DE DALLES ET BLOCS ROCHEUX DANS DES FORMATIONS ROCHEUSES ET COMPOSITION ASSOCIEE POUR TRANSMISSION ET MODERATION D'ENERGIE EXPLOSIVE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9830864A2] Rock slabs (10) or pieces (17) are broken from large rocks (10) or from rock formations (11) with reduced cracking of the broken rock slabs or pieces by drilling bore holes (13, 14, 15, 16) along the desired break lines, placing detonating cord (20) into the bore holes, filling the bore holes with a shock transmitting and moderating composition (21), and detonating the detonating cord (20). The shock transmitting and moderating composition (21) is preferably a gel with shock absorbing material (22) such as microspheres or micro gas bubbles suspended therein. Openings in rock can also be formed by drilling at least one bore hole within the desired opening and drilling a plurality of bore holes along the desired periphery of the desired opening. Explosives within the at least one bore hole within the desired opening is detonated to break rock within the opening and detonating cord (20) in the bore holes along the desired periphery of the desired opening which holes are filled with a shock transmitting and moderating composition (21) is detonated to break the rock inwardly of the desired periphery while leaving stable the rock outwardly of the periphery.

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