

Title (en)  
HYPER-PRESSURE PULSE EXCAVATOR

Title (de)  
HYPERDRUCKPULSBAGGER

Title (fr)  
EXCAVATRICE À IMPULSIONS À HYPERPRESSION

Publication  
**EP 2877697 A1 20150603 (EN)**

Application  
**EP 13823572 A 20130729**

Priority  
• US 201261676774 P 20120727  
• US 2013052567 W 20130729

Abstract (en)  
[origin: WO2014018977A1] A hyper-pressure water cannon, or pulse excavator, is able to discharge fluid pulses at extremely high velocities to fracture a rock face in excavation applications. A compressed water cannon can be used to generate hyper-pressure pulses by discharging the pulse into a straight nozzle section which leads to a convergent tapered nozzle. The hyper-pressure water cannon design is relatively compact, and the pulse generator can readily be maneuvered to cover the face of an excavation as part of a mobile mining system.

IPC 8 full level  
**E21C 37/12** (2006.01)

CPC (source: EP)  
**E21C 37/12** (2013.01)

Cited by  
DE102017119610A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2014018977 A1 20140130**; AU 2013295512 A1 20150219; AU 2013295512 B2 20160310; CA 2880114 A1 20140130;  
CA 2880114 C 20160517; EP 2877697 A1 20150603; EP 2877697 A4 20160302; EP 2877697 B1 20180516; NO 2968313 T3 20180630

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