

A B S T R A C T

EXCAVATION SYSTEM WITH INTERCHANGEABLE TOOLS

5 The invention relates to the field of excavation systems, and more particularly to excavation systems including tools for excavation by electric pulses. An excavation system of the invention comprises a support frame (34), a hydraulic circuit with a pump, and first
10 and second excavation tools. One of said first and second excavation tools is a mechanical excavation tool (1') having a hydraulic actuator and a mounting interface with at least one mechanical fastener member and at least one hydraulic coupling in fluid flow communication with
15 said hydraulic actuator, while the other one of said first and second excavation tools is a tool (1) for excavation by electric pulses, comprising an electricity generator (3) with a rotary shaft for generating electricity from rotation of the rotary shaft, a
20 hydraulic motor coupled to said rotary shaft to drive rotation of the rotary shaft, and an electronic power module (4) electrically connected to the electricity generator (3) in order to be powered by the electricity generator (3) so as to generate electric pulses of
25 instantaneous power that is higher than an instantaneous power of the electricity generator (3), a plurality of electrodes (5a, 5p) including at least one electrode (5a) connected to said electronic power module (4), the electrodes being arranged on said front face, and a
30 mounting interface (14) with at least one mechanical fastener member (22), and at least one hydraulic coupling (20) in fluid flow communication with said hydraulic motor (2). Each of the mounting interfaces of the first and second excavation tools is suitable for releasably
35 mounting the corresponding excavation tool in alternation under the support frame (34) of the excavation system, with the corresponding hydraulic coupling in fluid flow communication with said hydraulic circuit of the excavation assembly.

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Figures 2 and 6