

Title (en)

PROCESS AND APPARATUS FOR EXCAVATION USING AN EARTH CUTTER, AND CONSTRUCTION FILLING IN THE EXCAVATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ANLEGEN VON BODENEINSCHNITTEN UND DEREN BAUKONSTRUKTIVE VERFÜLLUNG HIERZU

Title (fr)

PROCEDE ET DISPOSITIF D'EXCAVATION METTANT EN OEUVRE UNE LAME DE SOL, ET REMBLAIEMENT DE L'EXCAVATION

Publication

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Application

EP 96945849 A 19961030

Priority

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Abstract (en)

[origin: WO9716605A3] The process and apparatus are characterized by a kinematic, rotatively mounted, bladed or lunated earth-working tool of slight depth, greater width and great length overall, termed an "earth cutter", which penetrates the ground vertically, horizontally or in a pivoted sweep with percussive and pressure-pulsed force, subject to oscillatory pulse control in an energy-minimizing resonance operation, which can destroy buried erratics while at the same time compressing and thereby stabilizing the exposed walls of the excavation, and by special designs in the apparatus that provide for continuous work flow of fill-in construction in the excavation made. The attendant construction work can be a structure-remote drainage system which with moisture-stopping troughs near the ground surface not only captures underground water flows, but also drains off surface water, so that the ground dries out and solidifies and that ground structures integrated in this wide-ranging system are also dried out free of excavated material, while any existing structures built into the ground are circumvented. When the construction is a drainage system, the latter can be ventilated by building in specially designed channel plates together with, for example, windmill-operated central shafts, so that incident groundwater not only is collected and carried off in liquid form, but is evaporated by the underground ventilation in the system of walled drains and so conveyed to the outside air.

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