

Title (en)
PROCESS FOR DISCHARGING SPOILS

Publication
EP 0273441 B1 19910605 (DE)

Application
EP 87119301 A 19871229

Priority
DE 3644818 A 19861231

Abstract (en)
[origin: US4900191A] In order to avoid the time-consuming transport by road or rail vehicles, in many cases, overburden is pumped to the outside of a tunnel under construction, where it is dumped onto dump-hills. In order to avoid such dump-hills as well as extended transport distances, according to the invention it is disclosed that the overburden is transported, dumped or stored, via channels drilled into the wall of the tunnel, inside of the mountain surrounding the tunnel, and also to transport the overburden, in case of a tunnel to be constructed under a waterway, by means of a pipe into the waterway or to the surface of the waterway.

IPC 1-7
E21D 9/12

IPC 8 full level
E21D 9/12 (2006.01); **E02D 29/045** (2006.01); **E21D 9/13** (2006.01)

CPC (source: EP US)
E02D 29/045 (2013.01 - EP US); **E21D 9/13** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0273441 A2 19880706; EP 0273441 A3 19890315; EP 0273441 B1 19910605; DE 3644818 A1 19880714; DE 3770602 D1 19910711; JP S63176595 A 19880720; US 4900191 A 19900213

DOCDB simple family (application)
EP 87119301 A 19871229; DE 3644818 A 19861231; DE 3770602 T 19871229; JP 32418287 A 19871223; US 13856087 A 19871224