Title (en)

Controlled-compressible thrust bearing for tubbing rings in tunnels

Title (de

Kontrolliert zusammendrückbares Drucklager für Tübbinge in einem Tübbingring

Title (fr)

Palier de butée à compression contrÔlée pour anneaux de cuvelage de tunnels

Publication

EP 0631034 B1 19971229 (DE)

Application

EP 94109459 A 19940619

Priority

CH 190993 A 19930625

Abstract (en)

[origin: EP0631034A1] In order to permit elastic absorption of the rock pressure occurring after the excavation of the tunnel in the case of tubbing rings which are composed of individual tubbing segments (1, 1'), compressible thrust bearings (2) are inserted between these segments. Each thrust bearing (2) is a box of elastically deformable material which has several hollow spaces in its interior. The boxes are compressed by the rock pressure until the hollow spaces are filled by the box material. The diameter of the tubbing ring is accordingly reduced. The deformation of each thrust bearing can be accurately controlled by appropriate dimensioning of the hollow spaces and also by filling the same with material when required and by controlled discharge of this material. <IMAGE>

IPC 1-7

E21D 11/38

IPC 8 full level

E21D 11/38 (2006.01)

CPC (source: EP)

E21D 11/385 (2013.01); E21D 11/388 (2016.01)

Cited by

DE102009057521A1; CN110778343A; DE102009057521B4; US6575664B1; WO0120130A3; WO2011069480A2; US8979434B2

Designated contracting state (EPC)

AT CH DE ES FR IT LI

DOCDB simple family (publication)

EP 0631034 A1 19941228; **EP 0631034 B1 19971229**; AT E161611 T1 19980115; CH 687557 A5 19961231; DE 59404867 D1 19980205; ES 2113580 T3 19980501

DOCDB simple family (application)

EP 94109459 A 19940619; AT 94109459 T 19940619; CH 190993 A 19930625; DE 59404867 T 19940619; ES 94109459 T 19940619