

Title (en)

Tubular rock bolt.

Title (de)

Rohrförmiger Gebirgsanker.

Title (fr)

Boulon tubulaire d'ancrage de roche.

Publication

**EP 0366337 A1 19900502 (EN)**

Application

**EP 89310689 A 19891018**

Priority

US 25988088 A 19881019

Abstract (en)

Method of manufacturing a tubular rock bolt comprising the steps of forming an oversize, thick walled tube of substantially circular, annular section, cold drawing the thus formed tube by elongation thereof through dies to a section of reduced outer diameter having a pre-determined wall thickness, cutting a portion of the tube to a predetermined length to form a bolt, providing rock anchor attachment means to one end of the bolt, in use to receive rock anchor means in load transfer relation therewith, and, providing load transfer attachment means at the other end of the bolt for the attachment, in use, of load transfer means in secured load transfer relation with the rock bolt other end. The tubular rock bolt may incorporate a visual ground movement indicator freely suspended as an unloaded rod element within the rock bolt, extending through and projecting outwardly beyond the rock bolt, to afford visual indication of any axial displacement or elongation of the rock bolt consequent upon loss of anchorage and/or settlement of the strata, or movement of the strata, inter alia, to cause significant extension of the rock bolt.

IPC 1-7

**E21D 21/00**; **E21D 21/02**

IPC 8 full level

**E21D 21/00** (2006.01); **E21D 21/02** (2006.01)

CPC (source: EP)

**E21D 21/008** (2013.01); **E21D 21/02** (2013.01)

Citation (search report)

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