

Title (en)
ANCHOR BOLT FOR GROUND STRENGTHENING

Publication
EP 0094908 B1 19881005 (DE)

Application
EP 83810193 A 19830506

Priority
• CH 302382 A 19820514
• CH 761482 A 19821229

Abstract (en)
[origin: ES8404462A1] A tie rod assembly for a rock borehole anchor includes a tension rod 3 having a plurality of wedge shaped spreading bolts 10 at its lower end surrounded by spreading sleeve 20 segments 21, and a sleeve 40 on its upper end threaded to a tension nut 60 which bears against a ground support or anchor plate 70 upon installation and tightening. The sleeve 40 mates with the tension rod via saw tooth configured circumferential ridges or fins 45, 46 having increasing inclination angles, to thereby provide for a constant force transmission per unit of tooth length. The tension nut and anchor plate have complementarily configured spherical bearing surfaces 65, 77, and the ground engaging lower area of the anchor plate has fracturable webs 75 to accommodate surface irregularities and projections.

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E21D 21/00

IPC 8 full level
E21D 21/00 (2006.01)

CPC (source: EP US)
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Cited by
DE19525610A1; CN102094660A; EP0188174A1; DE3902727A1; EP0383723A1; US5022791A; US4806053A; WO9519491A1; WO9526457A1

Designated contracting state (EPC)
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EP 0094908 A2 19831123; EP 0094908 A3 19860402; EP 0094908 B1 19881005; AU 1453183 A 19831117; AU 554035 B2 19860807; CA 1214670 A 19861202; DE 3378160 D1 19881110; DK 158106 B 19900326; DK 158106 C 19900820; DK 215583 A 19831115; DK 215583 D0 19830513; ES 522391 A0 19840501; ES 8404462 A1 19840501; NO 159678 B 19881017; NO 159678 C 19890125; NO 831500 L 19831115; US 4523880 A 19850618

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