

Title (en)
Drill bit assembly

Title (de)
Bohrmeißelanordnung

Title (fr)
Ensemble trépan

Publication
EP 2778338 A3 20160720 (EN)

Application
EP 14158835 A 20140311

Priority
SE 1350289 A 20130311

Abstract (en)
[origin: EP2778338A2] Various aspects provide for a drill bit assembly, which may include at least two drill bits (210, 220, 230). An inner drill bit (210) may be removably coupled to an outer drill bit (220), which may be coupled to a casing ring (230). Various apparatus and methods may be used to drill a hole (100) having two or more different diameters. The inner and outer drill bits (210, 220, 230) may be connected to a drive tube (214) to drill a hole (100) having a diameter of the outer drill bit (220) and thereafter a set able fluid (730, e.g. concrete) may be supplied to form a joint composite pillar, leaving the drill bits (210, 220, 230) and drive tube (214) to form reinforcement, preferably also a casing (234). The inner drill bit (210) may be decoupled from the outer drill bit (220) to drill a hole (120) (e.g., an extension of the first hole) having a diameter of the inner bit (e.g., smaller than that of the outer drill bit), prior to supplying the set able fluid (730).

IPC 8 full level
E21B 10/00 (2006.01)

CPC (source: EP US)
E21B 7/20 (2013.01 - EP); **E21B 10/64** (2013.01 - EP); **E21B 17/046** (2013.01 - EP US)

Citation (search report)
• [X1] US 5839519 A 19981124 - SPEDALE JR ANGELO LEE [US]
• [X1] US 7143846 B2 20061205 - JAERVELAE JORMA [FI], et al
• [X1] WO 2010071563 A1 20100624 - SANDVIK INTELLECTUAL PROPERTY [SE], et al
• [XD1] WO 9618798 A1 19960620 - ILOMAEKI VALTO [FI]
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• [A] US 2010126773 A1 20100527 - SOUTHARD ROBERT CHARLES [US]

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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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BA ME

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