

Title (en)
Drilling tool and drilling method

Title (de)
Werkzeug und Verfahren zum Bohren

Title (fr)
Outil et procédé de forage

Publication
EP 1837481 A1 20070926 (EN)

Application
EP 07005240 A 20070314

Priority
JP 2006082425 A 20060324

Abstract (en)

There are provided a drilling tool and a drilling method, the drilling tool including a ring bit 4 inserted into a tip portion of a casing pipe (1) to be rotatable around an axis line, and latched in a tip side in the direction of an axis line (O) by a latching means (7) and mounted to be moved in the direction of the axis line (O); an inner bit (5) inserted into the casing pipe (1) to be contacted toward the tip side of the casing pipe (1) and the ring bit (4), the said inner bit being engaged around the axis line (O) by an engaging means with respect to the ring bit (4); and a pull-out mechanism which pulls out the ring bit (4) to the tip side with respect to the casing pipe (1) in the latching means (7).

IPC 8 full level
E21B 7/20 (2006.01); **E21B 4/10** (2006.01); **E21B 10/64** (2006.01)

CPC (source: EP KR)
E21B 4/10 (2013.01 - EP); **E21B 7/20** (2013.01 - EP KR); **E21B 10/64** (2013.01 - EP)

Citation (search report)

- [A] US 5472057 A 19951205 - WINFREE MICHAEL B [US]
- [A] CA 2496199 A1 20050817 - TESCO CORP [CA]
- [A] WO 02081856 A1 20021017 - JAERVELAE JORMA [FI], et al
- [A] NL 6410471 A 19650312

Cited by
EP2834443A4; EP3103958A1; AU2012349363B2; JP2022527678A; EP3498967A4; CN111425145A; US2018195348A1; US10711527B2; EP4022159A4; US9428964B2; US11959337B2; US10030449B2; US10107045B2; EP3350402A4; CN106103880A; EP3128117A4; AU2015241806B2; WO2021208270A1; WO2014001601A1; WO2023161152A1; WO2010071563A1; WO2013108051A3; US10563462B2; US11643879B2; US10851593B2; EP3128117B1

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AL BA HR MK YU

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