

Title (en)

TONGUE BEND-BREAKING AND REMOVING TOOL, AND TONGUE BEND-BREAKING AND REMOVING TOOL USED ALSO AS TONGUED SPIRAL COIL INSERT INSERTING TOOL

Title (de)

WERKZEUG ZUM BIEGEBRECHEN UND ENTFERNEN VON ZAPFEN, EBENFALLS BENUTZT ZUM EINSETZEN VON MIT ZAPFEN VERSEHENEN SPIRALFEDEREINSÄTZEN

Title (fr)

OUTIL DE RETRAIT ET DE RUPTURE DE LANGUETTE PAR DEFORMATION, ET OUTIL DE RETRAIT ET DE RUPTURE DE LANGUETTE PAR DEFORMATION UTILISE EGALEMENT COMME OUTIL D'INSERTION D'UNE PIECE EN FORME DE RESSORT SPIRALE A LANGUETTE

Publication

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Application

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Priority

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Abstract (en)

[origin: TW419415B] The present invention provides a tang break-off tool which makes it possible to break off the tang after inserting the spiral coil insert with the tang into the taphole of the work, and further, to easily and with certainty remove the broken tang. The tool has a grip section 2 and an operating section 3, and has a permanent magnet 4 provided at the leading end of the operating section 3.

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CPC (source: EP KR)

B25B 27/143 (2013.01 - EP KR); **B25B 33/00** (2013.01 - KR)

Citation (search report)

- [X] US 3327516 A 19670627 - ELMER ANDERSON
- [A] US 5172842 A 19921222 - VISCIO DONALD P [US], et al
- [A] FR 2169293 A1 19730907 - ROLLS ROYCE [GB]
- [A] GB 1192336 A 19700520 - ROLLS ROYCE
- [A] US 2594901 A 19520429 - FORSTER JOHN O
- See references of WO 0114105A1

Cited by

DE102017223678A1; CN106915258A; DE10305898A1; US11370403B2; US11059152B2; WO2007142014A1; WO2016201477A1; US7340814B2; US9764454B2

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