

Title (en)

TWIST DRILL AND PRODUCTION METHOD

Title (de)

WENDELBOHRER UND HERSTELLUNGSVERFAHREN

Title (fr)

FORET HÉLICOÏDAL ET PROCÉDÉ DE FABRICATION

Publication

EP 3209442 A1 20170830 (DE)

Application

EP 15781928 A 20151020

Priority

- EP 14190033 A 20141023
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Abstract (en)

[origin: CA2964814A1] A method for producing a twist drill 1 has the following steps. A blank 27 is shaped to form a semi-finished product 34. The semi-finished product 34 is formed from a core 38, coaxial with the drill axis 2, having a radius 51 and a number of webs 39, arranged on the core 38, having a height 40. The semi-finished product 34 has a constant cross section along the drill axis 2. The webs 39 have a first portion 42 which adjoins the core 38 and in which a width 44 of the web 39 remains constant or decreases in the circumferential direction 11 with increasing radial distance from the drill axis 2. The webs 39 have a second portion 43 which adjoins the first portion 42 and in which the width 44 of the web increases in the circumferential direction 11 with increasing radial distance from the drill axis 2. The webs 39 of the semi-finished product are shaped into helical segments using a plurality of rolling tools that annularly enclose the semi-finished product 34 and roll on the webs 39 along the drill axis 2. The rolling tools 31 have teeth 48 that are inclined with respect to the drill axis 2. A height 20 of the helical segments is less than the height 40 of the webs 39. Helical segments formed from adjacent webs 39 are in contact with one another in a closing fold 26. The invention also relates to a twist drill.

IPC 8 full level

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Citation (search report)

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