

Title (en)
END MILLING CUTTER WITH DIFFERENT CUTTING EDGES

Title (de)
SCHAFTRÄSER MIT UNTERSCHIEDLICHEN SCHNEIDEN

Title (fr)
FRAISE À QUEUE AVEC DIFFÉRENTS TRANCHANTS

Publication
EP 2097200 A1 20090909 (DE)

Application
EP 07847382 A 20071127

Priority
• EP 2007062855 W 20071127
• DE 102006058258 A 20061208

Abstract (en)
[origin: WO2008068158A1] The present invention relates to an end milling cutter with a number of end-cutting edges (10, 20), at least a first one (10) of which reaches up to the axis (30) of the milling cutter. To provide an end milling cutter that allows much greater axial feed movements and nevertheless leaves behind relatively smooth surfaces at its end face under the normal feed movement of the milling cutter taking place laterally (perpendicularly to the axis), it is proposed according to the invention that the milling cutter has at least one further, second end-cutting edge (20) that is different from the first end-cutting edge (10), wherein the axial position and formation of the first cutting edge (10) and the second cutting edge (20) are provided in such a way that, when the rotating milling cutter axially enters a workpiece, a radially inner region (a) cuts only by the first cutting edge (10) from the axis (30) of the milling cutter to a first radius ($r_{\text{SUB} < i > / \text{SUB} >}$) that is less than the nominal radius and greater than a radially inner radius of the second cutting edge, and that, in a second region (b), which lies between the radius $r_{\text{SUB} < i > / \text{SUB} >}$ and a greater radius $r_{\text{SUB} > a < / \text{SUB} >}$, which can at most assume the value of the nominal radius (R) of the milling cutter, only the second cutting edge (20) cuts.

IPC 8 full level
B23C 5/10 (2006.01)

CPC (source: EP US)
B23C 5/10 (2013.01 - EP US); **B23C 2210/086** (2013.01 - EP US); **B23C 2210/287** (2013.01 - EP US); **B23C 2210/325** (2013.01 - EP US); **B23C 2210/54** (2013.01 - EP US); **Y10T 407/1946** (2015.01 - EP US); **Y10T 407/1962** (2015.01 - EP US)

Citation (search report)
See references of WO 2008068158A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102006058258 A1 20080612; EP 2097200 A1 20090909; JP 2010511522 A 20100415; US 2010098504 A1 20100422; WO 2008068158 A1 20080612

DOCDB simple family (application)
DE 102006058258 A 20061208; EP 07847382 A 20071127; EP 2007062855 W 20071127; JP 2009539697 A 20071127; US 44806807 A 20071127