

Title (en)

A METHOD OF BREAKING CHIPS AND APPARATUS THEREFOR

Title (de)

METHODE ZUM BRECHEN VON SPÄNEN UND GERÄT DAZU

Title (fr)

PROCEDE PERMETTANT DE BRISER LES COPEAUX, ET APPAREIL CORRESPONDANT

Publication

EP 0958080 A1 19991124 (EN)

Application

EP 96940754 A 19961213

Priority

- SG 9600018 W 19961213
- SG 9502241 A 19951220
- US 73109496 A 19961009

Abstract (en)

[origin: WO9722429A1] A method of breaking chips is disclosed in which the chip generated during cutting is broken into small pieces by increasing the shear strain at the shear plane, which is the joint between the chip and the workpiece, until fracture occurs at the shear plane. This is achieved by forming the chip (1) generated during cutting into a lever, in which the head (11) of the chip is the load-lifting point receiving a force from a first plane (9), the contact between the chip (1) and a second plane (12) of the chip breaker is the fulcrum, and the root (8) of the chip, which joins the chip to the shear plane is the force-exerting point exerting a force additional to the shear force acting along the shear plane to strain the material until fracture occurs at the shear plane.

IPC 1-7

B23B 27/22

IPC 8 full level

B23B 27/22 (2006.01); **B23B 25/02** (2006.01)

CPC (source: EP)

B23B 25/02 (2013.01)

Citation (search report)

See references of WO 9722429A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

WO 9722429 A1 19970626; AU 1073397 A 19970714; AU 707229 B2 19990708; CA 2241049 A1 19970626; CN 1207697 A 19990210; EP 0958080 A1 19991124; IL 125008 A0 19990126; JP 2000502290 A 20000229

DOCDB simple family (application)

SG 9600018 W 19961213; AU 1073397 A 19961213; CA 2241049 A 19961213; CN 96199707 A 19961213; EP 96940754 A 19961213; IL 12500896 A 19961213; JP 52272797 A 19961213