

Title (en)

METHOD AND APPARATUS OF MACHINING WITH IMPROVED CHIP CONTROL

Publication

EP 0546117 A4 19940511 (EN)

Application

EP 91918777 A 19910827

Priority

US 57667790 A 19900831

Abstract (en)

[origin: WO9204151A1] A nozzle apparatus (10) adapted for use with machine tools of different configuration, which perform different machining operations, comprises a nozzle body (26) having a nozzle insert (42) mounted within an outlet passageway (36) formed in the nozzle body at its intersection with a coaxial, larger diameter inlet passageway (28) connected to a source (34) of coolant. The nozzle insert and outlet passageway are constructed to induce the formation of shock waves within the coolant stream in the course of its passage through the interior of the nozzle body which increase the energy and velocity of the coolant stream so that it is effective to pierce the heat barrier developed at the interface between the cutting insert (18) and workpiece (14), and to assist in the breakage of chips (87) from the workpiece.

IPC 1-7

B23B 1/00

IPC 8 full level

B05B 1/34 (2006.01); **B05B 17/06** (2006.01); **B23B 1/00** (2006.01); **B23Q 11/00** (2006.01); **B23Q 11/10** (2006.01)

CPC (source: EP US)

B05B 17/0692 (2013.01 - EP); **B23Q 11/005** (2013.01 - EP US); **B05B 1/3402** (2018.07 - EP US)

Citation (search report)

- [A] GB 2096911 A 19821027 - SIMPKINS DAVID ROGERS PRICE
- See references of WO 9204151A1

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DOCDB simple family (publication)

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