

Title (en)

DEVICE AND METHOD FOR MACHINING A SOLID MATERIAL USING A WATER JET

Title (de)

VORRICHTUNG UND VERFAHREN ZUR BEARBEITUNG EINES FESTEN WERKSTOFFS MIT EINEM WASSERSTRAHL

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR TRAITER UN SOLIDE AVEC UN JET D'EAU

Publication

EP 2032309 B1 20101020 (DE)

Application

EP 07763719 A 20070622

Priority

- AT 2007000307 W 20070622
- AT 10662006 A 20060623

Abstract (en)

[origin: US2010024619A1] A method of machining a solid material using a water jet discharging from a nozzle is specified, wherein the water jet contains ice crystals and impacts on the solid material. In this case, a medium which is gaseous under standard conditions is dissolved in water at a mixing stage under pressure (1-150 bar) and is then compressed to 1000-4500 bar and pressed through a nozzle, under conditions which allow the dissolved gaseous medium to bubble out after leaving the nozzle, whereupon the heat of solution is withdrawn from the water and the ice crystals are formed.

IPC 8 full level

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CPC (source: EP US)

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