

Title (en)

CUTTING BY MEANS OF A JET OF LIQUID CRYOGENIC FLUID WITH ADDED ABRASIVE PARTICLES

Title (de)

SCHNEIDVORGANG MIT EINEM STRAHL AUS KRYOGENER FLÜSSIGKEIT MIT HINZUGEFÜGTEN SCHLEIFPARTIKELN

Title (fr)

COUPAGE PAR JET DE FLUIDE CRYOGÉNIQUE LIQUIDE ADDITIONNÉ DE PARTICULES ABRASIVES

Publication

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Application

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Abstract (en)

[origin: WO2011004085A1] The invention relates to a method for cutting a material, in which said material is cut using a cutting jet at a pressure of at least 100 bars, characterised in that the cutting jet consists of a mixture of at least one first compound in liquid form at a cryogenic temperature of less than -100°C and solid abrasive particles consisting of at least one abrasive material with a hardness number of at least 6 Mohs. The invention also relates to a device for implementing the method, which includes a focusing gun and a mixing chamber. The hardness of the material that forms all or part of the focusing gun is higher than the hardness of the solid abrasive particles used.

IPC 8 full level

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