

Title (en)

Cutting tool with blade made from fine-crystalline diamond

Title (de)

Schneidewerkzeug mit Klinge aus feinkristallinem Diamant

Title (fr)

Outil de coupe doté d'une lame en diamant cristallin fin

Publication

EP 2495081 B1 20140507 (DE)

Application

EP 11001694 A 20110301

Priority

EP 11001694 A 20110301

Abstract (en)

[origin: EP2495081A1] The cutting tool has a cutting edge formed with a synthetic diamond layer (2). The cutting edge is formed with a profile of decreasing film thickness. The diamond layer of fine crystalline diamond is formed with specific mean grain size. The radius of curvature of the diamond layer on the cutting edge is 3-100 nm. The cutting angle is 10-40[deg] . An independent claim is included for manufacturing method of cutting tool.

IPC 8 full level

B26B 21/58 (2006.01); **B26B 21/60** (2006.01)

CPC (source: EP US)

B26B 21/58 (2013.01 - EP US); **B26B 21/60** (2013.01 - EP US); **Y10T 83/929** (2015.04 - EP US)

Cited by

DE102022213666A1; WO2024125857A1; DE102022209741A1; WO2024056307A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2495081 A1 20120905; **EP 2495081 A8 20121024**; **EP 2495081 B1 20140507**; US 2012276826 A1 20121101; US 8904650 B2 20141209

DOCDB simple family (application)

EP 11001694 A 20110301; US 201213408093 A 20120229