

Title (en)  
DIAMOND-COATED DOCTOR BLADE

Title (de)  
DIAMANTBESCHICHTETE RAKEL

Title (fr)  
RACLE REVÊTUE DE DIAMANT

Publication  
**EP 2331329 A1 20110615 (DE)**

Application  
**EP 09818733 A 20090910**

Priority  
• CH 2009000303 W 20090910  
• CH 15922008 A 20081007

Abstract (en)  
[origin: WO2010040236A1] A doctor blade (100, 200), particularly for wiping printing ink off a surface of a printing plate and/or for use as a paper doctor knife, has a flat and elongated main body (111, 211) including a working edge region (113, 213) configured in a longitudinal direction, wherein at least the working edge region (113, 213) is covered with a first coating (120, 220) on the basis of a nickel-phosphorus alloy. The doctor blade (100, 200) is characterized in that monocrystalline and/or polycrystalline diamond particles (120.1, 220.1) are dispersed in the first coating (120, 220), wherein a particle sizes of the diamond particles (120.1, 220.1) measure at least 5 nm and less than 50 nm.

IPC 8 full level  
**B41F 9/10** (2006.01)

CPC (source: EP US)  
**B41F 9/1072** (2013.01 - EP US); **C23C 18/1601** (2013.01 - EP US); **C23C 18/1651** (2013.01 - EP US); **C23C 18/1662** (2013.01 - EP US);  
**C23C 18/1692** (2013.01 - EP US); **C23C 18/32** (2013.01 - EP US); **D21G 3/005** (2013.01 - EP US)

Citation (search report)  
See references of WO 2010040236A1

Designated contracting state (EPC)  
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 SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**WO 2010040236 A1 20100415**; BR PI0920669 A2 20151229; CH 699702 A1 20100415; CN 102256795 A 20111123;  
CN 102256795 B 20150311; DK 2331329 T3 20160104; EP 2331329 A1 20110615; EP 2331329 B1 20151007; ES 2554557 T3 20151221;  
JP 2012505087 A 20120301; JP 5373917 B2 20131218; MX 2011003523 A 20110502; PL 2331329 T3 20160129; US 2011226144 A1 20110922

DOCDB simple family (application)  
**CH 2009000303 W 20090910**; BR PI0920669 A 20090910; CH 15922008 A 20081007; CN 200980150157 A 20090910;  
DK 09818733 T 20090910; EP 09818733 A 20090910; ES 09818733 T 20090910; JP 2011530343 A 20090910; MX 2011003523 A 20090910;  
PL 09818733 T 20090910; US 200913121764 A 20090910