

Title (en)
COATING BASED ON NIAL2O4 IN SPINEL STRUCTURE

Title (de)
BESCHICHTUNG AUF NIAL2O4 BASIS IN SPINELLSTRUKTUR

Title (fr)
REVÊTEMENT À BASE DE NIAL2O4 EN STRUCTURE SPINELLE

Publication
EP 2547805 A1 20130123 (DE)

Application
EP 11711494 A 20110318

Priority

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- EP 10173410 A 20100819
- EP 2011054110 W 20110318
- EP 11711494 A 20110318

Abstract (en)
[origin: EP2369031A1] Coating comprises at least a compound of oxygen and/or nitrogen with at least two metal materials, where the compound is at least partially present in spinel structure. Independent claims are included for: (1) coating substrates by arc vaporization, where an alloy target comprising 10-80 (preferably 20-60) atom% of nickel is used as a target, oxygen and/or nitrogen are used as reactive gas, the alloy target contains aluminum as a component for producing the coating, and the aluminum/nickel ratio is varied to 300-800 standard cubic centimeters per minute by an oxygen flow, during the formation of the coating; and (2) a coated substrate, preferably tools or components, where the surface of the substrate on which the coating comes to lie, is a steel and the coating is formed.

IPC 8 full level
C23C 14/08 (2006.01); **C23C 14/32** (2006.01); **H01J 37/32** (2006.01)

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C23C 14/081 (2013.01 - EP US); **C23C 14/085** (2013.01 - EP US); **C23C 14/325** (2013.01 - EP US); **H01J 37/34** (2013.01 - EP US)

Citation (search report)
See references of WO 2011113927A1

Citation (examination)
US 2004042948 A1 20040304 - KANNO SHUICHI [JP], et al

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EP 2369031 A1 20110928; EP 2369031 A9 20120718; EP 2369031 B1 20160504; CN 103189541 A 20130703; CN 103189541 B 20150923; EP 2547805 A1 20130123; JP 2013522058 A 20130613; JP 5771884 B2 20150902; US 2013036942 A1 20130214; US 9428826 B2 20160830; WO 2011113927 A1 20110922

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EP 10173410 A 20100819; CN 201180026378 A 20110318; EP 11711494 A 20110318; EP 2011054110 W 20110318; JP 2012557563 A 20110318; US 201113635710 A 20110318