

Title (en)

METAL NITRIDE COATED SUBSTRATES.

Title (de)

METALLNITRID BESCHICHTETE SUBSTRATE.

Title (fr)

SUBSTRATS RECOUVERTS DE NITRURES METALLIQUES.

Publication

EP 0674723 A1 19951004 (EN)

Application

EP 94904442 A 19931214

Priority

- US 9312150 W 19931214
- US 99192992 A 19921217

Abstract (en)

[origin: WO9413853A1] A metal nitride coated substrate can be made by coating the substrate with an oxide of Al, Ti, or Zr or a hydroxide of Al, Ti, or Zr derived from a sol gel. The coated substrate is heated to a reaction temperature of at least about 850 DEG C and contacted with a gaseous reactant mixture comprising a nitrogen source and a carbon source. The molar ratio of nitrogen to carbon in the gaseous reactant mixture is at least about 15. The coated substrate is maintained at the reaction temperature for a sufficient time to convert the sol gel-derived coating to a metal nitride coating.

IPC 1-7

C23C 18/12; **C04B 41/50**

IPC 8 full level

C04B 41/50 (2006.01); **C04B 41/87** (2006.01); **C23C 18/12** (2006.01); **C23C 24/08** (2006.01); **C23C 28/04** (2006.01)

CPC (source: EP KR)

C04B 41/5062 (2013.01 - EP); **C23C 18/1204** (2013.01 - EP KR); **C23C 18/1245** (2013.01 - EP KR); **C23C 18/1254** (2013.01 - EP KR); **C23C 18/1275** (2013.01 - EP); **C23C 18/1279** (2013.01 - KR)

Citation (search report)

See references of WO 9413853A1

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US 9312150 W 19931214; CA 2151931 A 19931214; EP 94904442 A 19931214; JP 51448193 A 19931214; KR 19950702475 A 19950616