

Title (en)

LAMINATED SYSTEM, COATING COMPOSITION AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

SCHICHTSYSTEM, BESCHICHTUNGSZUSAMMENSETZUNG UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

SYSTEME STRATIFIE, COMPOSITION DE REVETEMENT ET PROCEDE DE PRODUCTION DE LADITE COMPOSITION

Publication

**EP 1565768 A1 20050824 (DE)**

Application

**EP 03810971 A 20031106**

Priority

- DE 10252421 A 20021112
- EP 0312391 W 20031106

Abstract (en)

[origin: DE10252421A1] Coating system with an abrasion-resistant layer containing a silane-based polycondensate made by the sol-gel method has a topcoat made by hardening another sol-gel polycondensate based on silicon compounds with epoxide groups on non-hydrolysable substituents and hydrolysable compounds of titanium, zirconium or aluminum. A coating system comprising (1) a substrate (S), (2) an abrasion-resistant layer (K) and (3) a topcoat (DE), in which layer (K) is made with a coating material containing a silane-based polycondensate obtained by the sol-gel method and (DE) is obtained by hardening a coating material which contains a polycondensate made by the sol-gel method and based on (A) silicon compound(s) with epoxide groups on non-hydrolysable substituents, (D) hydrolysable compound(s) of titanium, zirconium or aluminum and optionally (B) particulate materials. Independent claims are also included for (1) a method for the production of this coating system by applying the material for (K) to an optionally primed substrate (S), drying or hardening (K) so that reactive groups are still present, and then applying and hardening the material for (DE) (2) a coating system obtained by this method .

IPC 1-7

**G02B 1/10**; B05D 7/00; C08J 7/04

IPC 8 full level

**B05D 7/00** (2006.01); **C08J 7/043** (2020.01); **C08J 7/046** (2020.01); **C08J 7/056** (2020.01); **G02B 1/10** (2006.01)

CPC (source: EP KR US)

**B05D 7/544** (2013.01 - EP US); **B32B 27/06** (2013.01 - KR); **B32B 27/38** (2013.01 - KR); **C08J 7/043** (2020.01 - EP US); **C08J 7/046** (2020.01 - EP US); **C08J 7/056** (2020.01 - EP US); **G02B 1/105** (2020.05 - EP); **G02B 1/14** (2015.01 - EP US); **B82Y 30/00** (2013.01 - KR); **C08J 2369/00** (2013.01 - EP US); **Y10T 428/256** (2015.01 - EP US); **Y10T 428/259** (2015.01 - EP US)

Citation (search report)

See references of WO 2004044627A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**DE 10252421 A1 20040519**; AU 2003276262 A1 20040603; CN 1711485 A 20051221; EP 1565768 A1 20050824; JP 2006505432 A 20060216; KR 20050086508 A 20050830; TW 200418908 A 20041001; US 2004126573 A1 20040701; WO 2004044627 A1 20040527

DOCDB simple family (application)

**DE 10252421 A 20021112**; AU 2003276262 A 20031106; CN 200380103124 A 20031106; EP 0312391 W 20031106; EP 03810971 A 20031106; JP 2004550948 A 20031106; KR 20057008367 A 20050511; TW 92131444 A 20031111; US 70075003 A 20031104