

Title (en)  
PAINTING SYSTEM COMPONENT HAVING A MODIFIED SURFACE

Title (de)  
LACKIERANLAGENBAUTEIL MIT EINER MODIFIZIERTEN OBERFLÄCHE

Title (fr)  
ÉLÉMENT D'INSTALLATION DE PEINTURE MUNI D'UNE SURFACE MODIFIÉE

Publication  
**EP 2612710 B1 20180207 (DE)**

Application  
**EP 13001691 A 20101203**

Priority

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Abstract (en)  
[origin: WO2011069622A2] The invention relates to a painting system component, in particular a rotating bell (1) for a rotating atomiser, comprising a main body (1) and a surface coat (8) at least on a part of the surface of the main body (1). According to the invention, the surface coat (8) reduces the tendency of the painting system component to become dirty and/or improves the ease of cleaning of the painting system component.

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CPC (source: EP US)  
**B05B 3/1014** (2013.01 - EP US); **B05B 15/18** (2018.02 - EP US); **B05B 15/50** (2018.02 - EP US)

Citation (opposition)  
Opponent : Eisenmann SE

- US 5923944 A 19990713 - COFFINBERRY GEORGE A [US], et al
- GB 2170226 A 19860730 - LEYBOLD HERAEUS GMBH & CO KG
- EP 0435312 A1 19910703 - TOYODA CHUO KENKYUSHO KK [JP]
- WO 03064720 A1 20030807 - FRAUNHOFER GES FORSCHUNG [DE], et al
- EP 0087836 A1 19830907 - PHILIPS PATENTVERWALTUNG [DE], et al
- DE 4439924 A1 19960509 - BAYERISCHE MOTOREN WERKE AG [DE]
- DE 102006005765 A1 20070809 - HENKEL KGAA [DE]
- DE 10112854 A1 20011031 - FORD GLOBAL TECH INC [US]
- US 2007284255 A1 20071213 - GOROKHOVSKY VLADIMIR [US], et al
- US 6350397 B1 20020226 - HEIKKILA KURT E [US], et al
- EP 2015873 B1 20110727 - DUERR SYSTEMS GMBH [DE]
- US 4318941 A 19820309 - GILLETT JOHN E, et al
- US 2003003328 A1 20030102 - SPITSBERG IRENE [US], et al
- DE 19860136 A1 20000629 - BAYER AG [DE]
- DE 102006054158 A1 20080521 - WACKER CHEMIE AG [DE]
- JP 2006181556 A 20060713 - NISSAN MOTOR
- US 2005121312 A1 20050609 - SUI PING C [US], et al
- US 7507268 B2 20090324 - ROSENFLANZ ANATOLY Z [US]
- WO 2010006641 A1 20100121 - ABB RESEARCH LTD [CH], et al
- DE 4413306 C1 19951019 - DAIMLER BENZ AEROSPACE AG [DE]
- DE 202007015115 U1 20080417 - RUETER RUDI [DE]
- JP H07328490 A 19951219 - NIPPON SHARYO SEIZO KK, et al
- WO 9604123 A1 19960215 - BARTHLOTT WILHELM [DE]
- DE 3821767 A1 19890112 - ELECTRIC POWER RES INST [US]
- WILLI SCHORK: "Kapitel 2.3 Beschichtungsverfahren", REIBUNGSMINDERUNG AN ANTRIEBS- UND MOTORKOMPONENTEN DURCH BESCHICHTUNGEN MIT DIAMANTÄHNLICHEM AMORPHEN KOHLENSTOFF (DISSERTATION), 18 March 2010 (2010-03-18), pages 28 - 29, XP055336206, Retrieved from the Internet <URL:http://publica.fraunhofer.de/documents/N-120122.html>
- STRAEDE, CHRISTEN A.: "Application of ion implantation in tooling industry", NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH B, vol. 113, no. 1, June 1996 (1996-06-01), pages 161 - 166, XP004007787
- BARTZ, WILFRIED J.: "Keramiklager: Werkstoffe - Gleit- und Wälz- lager - Dichtungen", 2004, article "Tabelle 3.1", XP055527311
- GROTE, K.-H. ET AL.: "Taschenbuch für den Maschinenbau", 2005, ISBN: 978-3-540-22142-5, article "E136 -Werkstofftechnik - 7 Anhang E: Diagramme und Tabellen", XP055527336
- ANONYMOUS: "Tantalcarbide - Wikipedia", 31 July 2018 (2018-07-31), XP055529095, Retrieved from the Internet <URL:https://de.wikipedia.org/w/index.php?title=Tantalcarbide&oldid=179613150>
- ANONYMOUS: "Tantal - Wikipedia", 22 October 2018 (2018-10-22), XP055529091, Retrieved from the Internet <URL:https://de.wikipedia.org/w/index.php?title=Tantal&oldid=182043403>
- ANONYMOUS: "Niob - Wikipedia", 22 October 2018 (2018-10-22), XP055529083, Retrieved from the Internet <URL:https://de.wikipedia.org/w/index.php?title=Niob&oldid=182044545>
- ANONYMOUS: "Vanadium - Wikipedia", XP055529074, Retrieved from the Internet <URL:https://de.wikipedia.org/w/index.php?title=Vanadium&oldid=181216624>
- ANONYMOUS: "Mittenrauwert, Wikipedia", 9 March 2018 (2018-03-09), XP055527942, Retrieved from the Internet <URL:https://de.wikipedia.org/w/index.php?title=Mittenrauwert&oldid=174833212>

Cited by  
DE102014222240A1; CN107110029A

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DOCDB simple family (publication)

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ES 2667320 T3 20180510; ES 2667320 T5 20240227; ES 2668093 T3 20180516; ES 2668093 T5 20210216; HU E037576 T2 20180928;  
HU E038951 T2 20181228; US 2012305681 A1 20121206; US 9731311 B2 20170815; WO 2011069622 A2 20110616;  
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