

## Title (en)

Method for scattering friction-inhibiting materials and accompanying device

## Title (de)

Verfahren zum Aufstreuen abriebhemmender Werkstoffe und Vorrichtung hierzu

## Title (fr)

Procédé de répartition de matières premières à friction réduite et procédé correspondant

## Publication

**EP 2106903 A1 20091007 (DE)**

## Application

**EP 08017183 A 20080930**

## Priority

- EP 08003273 A 20080222
- EP 08017183 A 20080930

## Abstract (en)

The method comprises sequentially introducing two particle fractions, each of which has different sizes and/or compositions, on a flat substrate using electrostatic field with different potential differences. The electrostatic field has a potential difference of 30-100 kV. A distance of the electrodes developing the electrostatic field is 15-300 mm. The particles have an average particle size of 20-70  $\mu\text{m}$ . The substrate has an adhesion promoting layer that is conductive and is a resin layer or a lacquer layer. The average applied quantity of the particles is 20-30 g/m<sup>2</sup>. The method comprises sequentially introducing two particle fractions, each of which has different sizes and/or compositions, on a flat substrate using electrostatic field with different potential differences. The electrostatic field has a potential difference of 30-100 kV. A distance of the electrodes developing the electrostatic field is 15-300 mm. The particles have an average particle size of 20-70  $\mu\text{m}$ . The substrate has an adhesion promoting layer that is conductive and is a resin layer or a lacquer layer. The average applied quantity of the particles is 20-30 g/m<sup>2</sup>, where the distribution accuracy is 2% or better. The particles have a surface resistance of  $10^1 > \omega / \text{cm}^2$ . An independent claim is included for a device for applying wear-resistant particles on a flat substrate.

## Abstract (de)

Die Erfindung betrifft ein Verfahren zum Auftragen verschleißhemmender Partikel auf ein flächiges Substrat und zeichnet sich dadurch aus, dass der Auftrag mittels eines elektrostatischen Feldes mit einer Potentialdifferenz von wenigstens 10 kV erfolgt.

## IPC 8 full level

**B05B 5/03** (2006.01); **B05B 5/16** (2006.01); **B05D 1/04** (2006.01); **B05D 1/06** (2006.01); **B05D 1/14** (2006.01); **B32B 21/06** (2006.01); **B32B 23/02** (2006.01); **B32B 23/12** (2006.01); **B32B 27/42** (2006.01); **B32B 29/00** (2006.01); **B32B 29/06** (2006.01); **B44C 5/04** (2006.01)

## CPC (source: EP)

**B05B 5/081** (2013.01); **B05B 5/14** (2013.01); **B05B 5/1683** (2013.01); **B05B 7/1422** (2013.01); **B05B 14/20** (2018.01); **B05D 1/007** (2013.01); **B05D 1/16** (2013.01); **B05D 1/30** (2013.01); **B44C 5/0476** (2013.01); **B05B 5/084** (2013.01); **B05B 14/10** (2018.01); **B05D 1/14** (2013.01); **B05D 2203/20** (2013.01); **B05D 2203/22** (2013.01)

## Citation (applicant)

- US 4940503 A 19900710 - LINDGREN KENT O [SE], et al
- WO 0044984 A1 20000803 - KRONOSPAN TECH CO LTD [CY], et al
- WO 0044576 A1 20000803 - KRONOSPAN TECH CO LTD [CY], et al
- EP 1801290 A2 20070627 - KRONOTEC AG [CH]
- WO 2005080096 A2 20050901 - KRONOSPAN TECH CO LTD [CY], et al
- EP 08003273 A 20080222

## Citation (search report)

- [DX] US 4940503 A 19900710 - LINDGREN KENT O [SE], et al
- [A] US 3770482 A 19731106 - MILLAR J, et al
- [DA] WO 2005080096 A2 20050901 - KRONOSPAN TECH CO LTD [CY], et al

## Citation (examination)

- US 2001049911 A1 20011213 - SWEI GWO SHIN [US], et al
- US 5698269 A 19971216 - CARLBLOM LELAND H [US], et al

## Cited by

EP4159470A1; EP2189282A1; EP3328921A4; US10899166B2; US11633884B2; US10344379B2; US10017950B2; US11401718B2; US10913176B2; EP3578383A1; US10035358B2; US10556447B2; US11833846B2; US10041212B2; US10988901B2; US11566380B2; US11878324B2; US10016988B2; US10414173B2; US11065889B2; US9873803B2; US10029484B2; US10189281B2; US10369814B2; US10384471B2; US10596837B2; US10723147B2; US10800186B2; US11014378B2; US11130352B2; US11285508B2

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## Designated extension state (EPC)

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## DOCDB simple family (application)

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