

Title (en)  
Method for processing a structured surface

Title (de)  
Verfahren zur Bearbeitung einer strukturierten Oberfläche

Title (fr)  
Procédé de traitement d'une surface structurée

Publication  
**EP 2060658 A2 20090520 (DE)**

Application  
**EP 07023647 A 20071206**

Priority  
DE 102007055053 A 20071116

Abstract (en)  
The method for treating a surface of an embossing tool such as a press plate (1) or an endless belt, comprises applying a first mask on the surface for fine structuring, chemically treating the surface provided with the first mask for obtaining a surface structure, applying a second mask on the chemically treated surface for pore structuring, chemically treating the surface provided with the second mask for obtaining the surface structure, applying a third mask on the chemically treated surface, and chemically treating the surface provided with the third mask. The method for treating a surface of an embossing tool such as a press plate (1) or an endless belt, comprises applying a first mask on the surface for fine structuring, chemically treating the surface provided with the first mask for obtaining a surface structure, applying a second mask on the chemically treated surface for pore structuring, chemically treating the surface provided with the second mask for obtaining the surface structure, applying a third mask on the chemically treated surface, chemically treating the surface provided with the third mask, polishing the chemically treated surface, activating the polished surface, cleaning the activated surface, chrome-plating the cleaned surface, applying a fourth mask on the chrome-plated surface, and chrome-plating the surface chrome-plated with the fourth mask. The masks are applied by the digital printing technique. Independent claims are included for: (1) a method for treating a structured surface of an embossing tool; and (2) an embossing tool.

Abstract (de)  
Die Erfindung betrifft ein Verfahren zur Bearbeitung einer strukturierten Oberfläche eines Prägewerkzeugs, bei dem die Oberfläche mit einer ersten metallischen Beschichtung (6) vollflächig versehen wird. Um die Gestaltungsmöglichkeit von strukturierten Oberflächen zu erhöhen wird erfindungsgemäß vorgeschlagen, dass auf der ersten Beschichtung (6) in vorbestimmten Bereichen zumindest eine weitere metallische Beschichtung (7) angeordnet wird, wobei sich der Glanzgrad der ersten Beschichtung (6) von dem der weiteren Beschichtung (7) unterscheidet. Durch die Maßnahme können beispielsweise Holzporen wesentlich besser nachempfunden werden.

IPC 8 full level  
**C23C 18/16** (2006.01)

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**B30B 15/06** (2013.01); **B30B 15/062** (2013.01); **B44B 5/026** (2013.01); **B44C 1/227** (2013.01); **B44C 3/025** (2013.01); **C23C 18/1605** (2013.01); **C23C 18/1651** (2013.01); **C23C 18/1844** (2013.01); **B30B 5/04** (2013.01)

Citation (applicant)  
DE 10224128 A1 20031218 - SCHMID RHYNER AG ADLISWIL [CH]

Cited by  
EP3141399A1; US2016193866A1; US2015158330A1; RU2664374C1; ITUB20153556A1; US10563309B1; EP3088173A1; DE102019106856A1; EP2123476A3; WO2021074065A1; US9138774B2; US9561524B2; WO2016113290A1; WO2013163971A1; WO2021074063A1; EP2497650A1; EP2848424A1; KR20160054506A; AU2014283868B2; RU2656325C2; AU2014320767B2; RU2659953C2; WO2024003125A1; DE102022116423B4; DE102022125371A1; WO2024068230A1; DE102018010010A1; WO2020135949A1; WO2020187601A1; US11407250B2; DE102022125369A1; WO2024068228A1; WO2012119586A1; WO2014202041A1; WO2015036070A1; EP3141399B1; EP2497650B1; EP3245076B1; EP2123476A2

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