

Title (en)

SURFACE COMPRISING A MICROSTRUCTURE THAT REDUCES ADHESION AND ASSOCIATED PRODUCTION METHOD

Title (de)

OBERFLÄCHE MIT EINER HAFTUNGSVERMINDERNDEN MIKROSTRUKTUR UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

SURFACE A MICROSTRUCTURE DIMINUANT L'ADHERENCE ET PROCEDE DE FABRICATION ASSOCIE

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Application

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Abstract (en)

[origin: WO2006021507A1] The invention relates to a surface comprising a microstructure that reduces adhesion and to a method for producing said microstructure. Microstructures of this type that reduce adhesion are known and are used, for example, to configure self-cleaning surfaces that use the Lotus effect. According to the invention, the surface is produced electrochemically by means of reverse pulse plating, the known microstructure being first produced and a nanostructure that is overlaid on the microstructure is produced at the same time or in a subsequent step. To achieve this for example, the pulse length of the current pulse that is used during the reverse pulse plating lies in the millisecond range and has a pulse length ratio greater than 1:3 (anodic:cathodic). The microstructure that has been produced, consisting of peaks (19) and troughs (20) is then overlaid with peaks (19n) and troughs (20n) of a smaller size order belonging to the nanostructure, thus permitting the Lotus effect that is achieved by the surface to be greatly improved.

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