

Title (en)
SULPHURATION METHOD OF FERROUS ALLOY PARTS IN AN AQUEOUS SOLUTION

Title (de)
SCHWEFELUNGSVERFAHREN FÜR EISENLEGIERUNGSTEILE IN EINER WÄSSRIGEN LÖSUNG

Title (fr)
PROCEDE DE SULFURATION DE PIECES EN ALLIAGE FERREUX EN SOLUTION AQUEUSE

Publication
EP 2097561 B1 20120704 (FR)

Application
EP 07870292 A 20071116

Priority
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• FR 0655097 A 20061124

Abstract (en)
[origin: FR2909102A1] The superficial treatment method by electrolysis of ferrous surfaces to enhance friction or tread and seizing resistance features, where the surfaces form an electrolysis anode and an electrolysis bath having sodium monosulfide, water, sodium chloride and triethanolamine in quantities which facilitates a sulfuration reaction of the surfaces. The sodium monosulfide is introduced at a concentration equivalent to a concentration of sulfide ions of 20-90 g/L. The sodium chloride is introduced at a concentration equivalent to a concentration of chloride ions of 15-200 g/L. The superficial treatment method by electrolysis of ferrous surfaces to enhance friction or tread and seizing resistance features, where the surfaces form an electrolysis anode and an electrolysis bath having sodium monosulfide, water, sodium chloride and triethanolamine in quantities which facilitates a sulfuration reaction of the surfaces. The sodium monosulfide is introduced at a concentration equivalent to a concentration of sulfide ions of 20-90 g/L. The sodium chloride is introduced at a concentration equivalent to a concentration of chloride ions of 15-200 g/L. A content of triethanolamine is 100-300 mL/L. A working temperature of the bath is lower than 70[deg] C. A duration of the treatment by electrolysis is few seconds, and a density flow applied to the treatment is 8 A/dm². A cathode used in the process is made of stainless steel. An independent claim is included for a part of which surface is treated.

IPC 8 full level
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