

Title (en)

DEPOSITION OF METAL IONS ONTO SURFACES OF CONDUCTIVE SUBSTRATES

Title (de)

ABSCHIEDUNG VON METALLIONEN AUF OBERFLÄCHEN LEITENDER SUBSTRATE

Title (fr)

DÉPÔT D'IONS MÉTALLIQUES SUR DES SURFACES DE SUBSTRATS CONDUCTEURS

Publication

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Application

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Abstract (en)

[origin: WO2008151173A1] The present invention provides compositions and processes for preparing metallic ions for deposition on and/or into conductive substrates, such as metals, to substantially eliminate friction from metal to metal contact. It is used in the aqueous embodiment to form new metal surfaces on all metal substrates. The processes form stable aqueous solutions of metal and metalloid ions that can be adsorbed or absorbed on and/or into conductive substrates. The aqueous solutions consist of ammonium alkali metal phosphate salts, and/or ammonium alkali metal sulfate salts mixed with a water soluble metal or metalloid salt from Group I through Group VIII of the periodic table of elements. The aqueous solutions allow for a nano deposition of the metal ions on and/or into the surfaces of conductive substrates. The surfaces created by the deposited metal ions will provide metal passivation and substantially eliminate friction in metal-to-metal contact without the use of hydrocarbon based lubricants.

IPC 8 full level

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Citation (search report)

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- [X] US 5540788 A 19960730 - DEFALCO FRANK G [US], et al
- [A] WO 2005120722 A2 20051222 - PIGMENTAN ANTICORROSIVE PIGMEN [IL], et al
- See references of WO 2008151173A1

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 JP 2014159643 A 20140904; JP 5722032 B2 20150520; JP 5926317 B2 20160525; KR 101506360 B1 20150326; KR 20100040832 A 20100421;
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