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ATOTECH DEUTSCHLAND GMBH [DE/DE];
Erasmusstrasse 20, 10553 Berlin (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CZECZKA, Regina**
[DE/DE]; Potsdamer Chaussee 88, 14476 Gross Glienicke
(DE). **STAMP, Lutz** [DE/DE]; Rauschstrasse 52, 13509
Berlin (DE).(74) Agent: **EFFERT, BRESSEL UND KOLLEGEN**;
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ACTION

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(54) Title: DIRECT ELECTROLYTIC METALLIZATION OF NON-CONDUCTING SUBSTRATES

(57) Abstract: The invention relates to a method for the direct electrolytic metallization of electrically non-conducting substrate surfaces comprising bringing the substrate surfaces into contact with a water-soluble polymer; treating the substrate surfaces with a permanganate solution; treating the substrate surfaces with an acidic aqueous solution or an acidic microemulsion of aqueous base containing at least one thiophene compound and at least one alkane sulfonic acid selected from the group comprising methane sulfonic acid, ethane sulfonic acid and ethane disulfonic acid; electrolytically metallizing the substrate surfaces.