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(71) Applicant: **MACDERMID ENTHONE INC.** [US/US];
245 Freight Street, Waterbury, Connecticut 06702 (US).

(72) Inventors: **BERNARDS, Roger**; 82 Westside Road,
Goshen, Connecticut 06756 (US). **ABEL-TATIS, Emely**;
8 Oaktree Court, Bethel, Connecticut 06801 (US).

(74) Agent: **CALCAGNI, Jennifer A.** et al.; Carmody Torrance
Sandak & Hennessey LLP, P.O. Box 1950, 195 Church
Street, New Haven, Connecticut 06509-1950 (US).

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(54) Title: GOLD PLATING BATH AND GOLD PLATED FINAL FINISH

(57) Abstract: An autocatalytic gold bath capable of depositing gold from solution onto a substrate, wherein the substrate has one or more metal layers thereon. The autocatalytic gold bath includes (a) a chelator; (b) a gold salt; and (c) a reducing agent, wherein the reducing agent comprises an organic molecule having more than one carbon atom on the organic molecule. A process of plating gold onto the surface of the one or more metal layers on the substrate is also included. The gold plating bath can be used to deposit a final finish to the surface of the one or more metal layers which can be formed in an ENIG, ENEPIG, EPAG, direct gold over copper or gold over silver process.

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