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(71) Applicant: **JOHNSON MATTHEY PUBLIC LIMITED COMPANY** [GB/GB]; 5th Floor, 25 Farringdon Street, London EC4A 4AB (GB).

(72) Inventor: **BOARDMAN, Alan**; Johnson Matthey Technology Centre, Blount's Court Road, Sonning Common, Reading Berkshire RG4 9NH (GB).

(74) Agent: **LORKIN, Thomas**; Johnson Matthey PLC, Gate 20, Orchard Road, Royston Hertfordshire SG8 5HE (GB).

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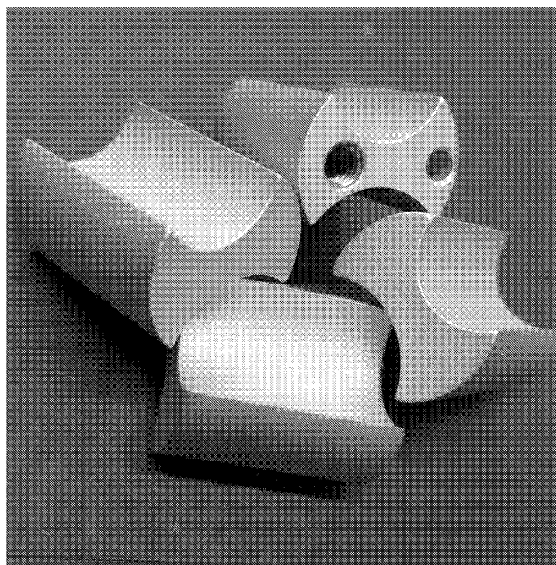


Figure 1.

(57) Abstract: The invention relates to an aqueous electroplating solution for alkaline electroplating, comprising:  $[M(NH_3)_4]^{2+}$  ions, wherein M is selected from the group consisting of Pd or Pt; and organic anions selected from the group consisting of bicarbonate, carbonate, or a mixture thereof; wherein the following species, if present, are present in the following amounts: alkali metals in an amount of less than 5 g/L; compounds comprising phosphorus in an amount of less than 5 g/L; compounds comprising boron in an amount of less than 5 g/L. The invention also relates to an electroplating bath comprising the electroplating solution, and a method of forming a metal layer on a substrate by electroplating using the electroplating solution.

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