

Title (en)  
ELECTROLESS GOLD PLATING BATH

Title (de)  
STROMLOSES GOLDPLATTIERUNGSBAD

Title (fr)  
BAIN DE PLACAGE D'OR SANS COURANT

Publication  
**EP 4166690 A1 20230419 (EN)**

Application  
**EP 22197168 A 20220922**

Priority  
JP 2021168259 A 20211013

Abstract (en)  
An electroless gold plating bath is presented, which is capable of forming a uniform gold plating film with a sufficient thickness in one step in both the ENIG process and the ENEPIG process. The electroless gold plating bath includes a gold sulfite, a thiosulfate, ascorbic acid compounds, and hydrazine compounds, the hydrazine compounds being at least one selected from the group consisting of adipic dihydrazide, propionic hydrazide, hydrazine sulfate, hydrazine monohydrochloride, hydrazine dihydrochloride, hydrazine carbonate, hydrazine monohydrate, sebacic dihydrazide, dodecanediohydrazide, isophthalic dihydrazide, salicylic hydrazide, 3-hydro-2-naphthoic hydrazide, benzophenone hydrazone, phenylhydrazine, benzylhydrazine monohydrochloride, methylhydrazine sulfate, and isopropylhydrazine hydrochloride.

IPC 8 full level  
**C23C 18/44** (2006.01); **C23C 18/16** (2006.01); **C23C 18/18** (2006.01)

CPC (source: EP KR US)  
**C23C 18/42** (2013.01 - US); **C23C 18/44** (2013.01 - EP KR); **C23F 11/149** (2013.01 - KR); **C23C 18/1651** (2013.01 - EP);  
**C23C 18/1803** (2013.01 - EP)

Citation (applicant)  
JP 2927142 B2 19990728

Citation (search report)  
• [X] US 5364460 A 19941115 - MORIMOTO KEIZIN [JP], et al  
• [X] JP 2017025399 A 20170202 - UEMURA KOGYO KK  
• [A] JP 2013224496 A 20131031 - JAPAN PURE CHEMICAL CO LTD  
• [A] EP 0618308 B1 19980617 - UYEMURA C & CO LTD [JP]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
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TW 202331000 A 20230801; US 2023111446 A1 20230413

DOCDB simple family (application)  
**EP 22197168 A 20220922**; CN 202211209004 A 20220930; JP 2021168259 A 20211013; KR 20220128622 A 20221007;  
TW 111138582 A 20221012; US 202217959847 A 20221004