

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2011/002311 A1 (AUCKLAND UNISERVICES LTD [NZ]; GAO WEI [NZ]; CHEN WEIWEI [NZ]) 6 January 2011 (2011-01-06) * abstract * * figures 2c, 24 * * examples 1, 3, 6-11 * * claims 4, 25 * * page 2, lines 2-4 * * page 2, line 26 - page 3, line 12 * * page 7, lines 34-35 * * page 8, lines 1-4, 18-25 * -----	1-15	INV. C23C18/16 C25D21/10 C25D15/02 C25D21/14 C25D13/10 C25D21/02 C25D1/00 C25D5/00 C25D3/56 C25D3/62 C25D3/46
X	EP 2 103 718 A1 (NIHON PARKERIZING [JP]) 23 September 2009 (2009-09-23) * abstract * * * examples 1, 5 * * claim 1 * * paragraphs [0022], [0025] - [0027], [0033], [0045] * -----	1-5, 8-13,15	C25D15/00 C25D21/12 C23C18/34 C23C18/36
			TECHNICAL FIELDS SEARCHED (IPC)
			C25D
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search <b>The Hague</b>		Date of completion of the search <b>4 December 2017</b>	Examiner <b>Lange, Ronny</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims:  
1-15(partially)

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-15(partially)

Inventive concept I regards a plating or coating method for producing a metal-ceramic composite coating on a substrate, the method comprising adding a sol of a ceramic phase to a plating solution or electrolyte, and controlling the pH, degree of mixing, and/or temperature of the plating solution or electrolyte to reduce or prevent the precipitation of visible particles and/or agglomerates of the ceramic phase in the plating solution or electrolyte, wherein precursors of the ceramic phase exist in the sol, and wherein the sol is added prior to carrying out the plating or coating, wherein the coating, other than the ceramic phase comprises Ni, Ni-P, Ni-W-P, Ni-Cu-P, Ni-W, or Ni-B.

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2. claims: 1-15(partially)

Inventive concept II regards a plating or coating method for producing a metal-ceramic composite coating on a substrate, the method comprising adding a sol of a ceramic phase to a plating solution or electrolyte, and controlling the pH, degree of mixing, and/or temperature of the plating solution or electrolyte to reduce or prevent the precipitation of visible particles and/or agglomerates of the ceramic phase in the plating solution or electrolyte, wherein precursors of the ceramic phase exist in the sol, and wherein the sol is added prior to carrying out the plating or coating, wherein the coating, other than the ceramic phase comprises Au-Ni, Ni-Zn, Ni-Co, Ni-Fe.

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3. claims: 1-15(partially)

Inventive concept III regards a plating or coating method for producing a metal-ceramic composite coating on a substrate, the method comprising adding a sol of a ceramic phase to a plating solution or electrolyte, and controlling the pH, degree of mixing, and/or temperature of the plating solution or electrolyte to reduce or prevent the precipitation of visible particles and/or agglomerates of the ceramic phase in the plating solution or electrolyte, wherein precursors of the ceramic phase exist in the sol, and wherein the sol is added prior to carrying out the plating or coating, wherein the coating, other than the ceramic phase comprises Cr, Cu, Zn, Ag, Au, Pd, Cd, Sn, Pb, Ru, Rh, Os, Ir, Fe, Co, In, As, Sb, Bi, Mn, Re, Al, Zr, Ti, Hf, V, Nb, Ta, W, and Mo, or an alloy of any two or more thereof.

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 15 79 8809

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-12-2017

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