



New connection on: : 15-09-2017 : 23:18:39 - Last disconnection on: : 15-09-2017 : 23:18:39

V 4.0.0.43847(LP,U,linux) (Rev:41675 2016-01-15 13:33:59 +0100#(D201710)) (RPM D201710)

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### [EPODOC: SS 10] process and culinary and support

Results in EPODOC 37

### [SS 11] solgel and composition

Results in EPODOC 15

### [SS 12] ..li



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PN - [WO2017070922](#) A1 20170504  
PR - WO2015CN93339 20151030  
AP - WO2015CN93339 20151030  
DT - \*; Rep  
CT - |CN| ISR (A1)  
[KR100845403B](#) B1 20080710  
[XY] (YU CHANG GUG [KR])  
[X] 1-8  
\* claims 1-16, description, embodiments 1-3, experimental examples 1-3  
claims 1-16, description, embodiments 1-3, experimental examples 1-3 \*  
[Y] 9-15;  
[CN1753958](#) A 20060329  
[Y] (KONINKL PHILIPS ELECTRONICS NV [NL])  
[Y] 9-15  
\* description, page 1, lines 21 and 22, page 3, lines 11-15 and 22-26, page 6, line 9 \*;  
[CN102741369](#) A 20121017  
[X] (CLARIANT FINANCE BVI LTD)  
[X] 1-15

FIG. 1

|                             |
|-----------------------------|
| The second protection layer |
| The First protection layer  |
| Light Metal                 |
| The First protection layer  |
| The second protection layer |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | <p>* claims 1-15, description, paragraphs [0011]-[0022], [0084]-[0089], [0103]-[0106], [0118]-[0129] and [0140]-[0149] *;</p> <p><a href="#">CN104364326</a> A 20150218</p> <p>[A] (SCHOTT AG)</p> <p>[A] 1-15</p> <p>* claims 1-2, description, paragraphs [0016]-[0019], [0037], [0077], [0103]-[0118] *</p>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CCI | - <a href="#">C09D1/00</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CUI | - <a href="#">C09D175/00</a> ; <a href="#">C09D175/04</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CLU | - <a href="#">C09D175/04</a> , <a href="#">C08L33/12</a> , <a href="#">C08K5/5415</a> , INV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|     | - <a href="#">C09D175/04</a> , <a href="#">C08L33/12</a> , <a href="#">C08L27/18</a> , <a href="#">C08K5/5415</a> , INV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CCA | - <a href="#">C09D7/1216</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| PA  | - HEWLETT-PACKARD DEV COMPANY L P [US]; WU KUANTING [CN]; KANG YU-CHUAN [CN]; CHANG CHI-HAO [CN]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| TI  | - <b>SOL-GEL</b> HYBRID COATING <b>COMPOSITION</b> , COATING PROCESS AND COMPOSITE COATING LAYERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| AB  | - This disclosure provides a <b>sol-gel</b> hybrid coating <b>composition</b> , comprising a <b>sol-gel</b> precursor, a polymer and a solvent, wherein the <b>sol-gel</b> precursor comprises tetraethyl orthosilicate and the polymer comprises polyurethane and polyacrylic. This disclosure also provides a coating process, comprising: subjecting a light metal to micro-arc oxidation treatment to form a first protection layer on the light metal, and coating the <b>sol-gel</b> hybrid coating <b>composition</b> onto the first protection layer to form a second protection layer. This disclosure further provides composite coating layers, comprising: a first layer obtained by micro-arc oxidation treatment, and a second layer |

obtained by dip coating with  
the **sol-gel** hybrid  
coating **composition**.

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PN - [WO2015086999](#) A1 20150618

PR - FR20130062522 20131212

AP - WO2014FR53266 20141211

DT - \*; Rep

CT - |EP| ISR (A1)  
[EP2505619](#) A1 20121003  
[XDY] (SEB SA [FR])  
[XD] 1,4-9  
\* paragraphs [0031] - [0051] \*  
[Y] 3,10-15;  
[EP2412846](#) A1 20120201  
[XY] (SEB SA [FR])  
[X] 1,3-5,9  
\* paragraphs [0029] - [0057];  
figure 2; example 4 \*  
[Y] 3,10,14,15;  
[EP1835002](#) A2 20070919  
[XYI] (CERASOL HONG KONG  
LIMITED [HK], et al)  
[X] 1,5,9  
\* abstract \*  
\* paragraphs [0060] - [0062];  
examples 6a-6b \*  
\* paragraphs [0040] - [0045] \*  
\* paragraphs [0059] , [0001] \*  
[Y] 3,10-15  
[I] 2;  
[WO2010023402](#) A1 20100304  
[Y] (SEB SA [FR], et al)  
[Y] 10-15  
\* abstract \*  
\* page 19, line 19; example 4;  
claims 17-24 \*

CCI - [A47J36/02](#) ; [C09D183/04](#) ;  
[C09D183/10](#) ; [C25B1/04](#)

CUI - [B05D7/542](#) ; [B05D1/322](#) ;  
[B05D3/0254](#)

CLC - [C09D183/04](#) , [C08K5/5415](#) , INV  
- [C09D183/04](#) , [C08K5/544](#) , INV

CCA - [Y02E60/366](#) ; [C08G77/445](#)

PA - SEB SA [FR]

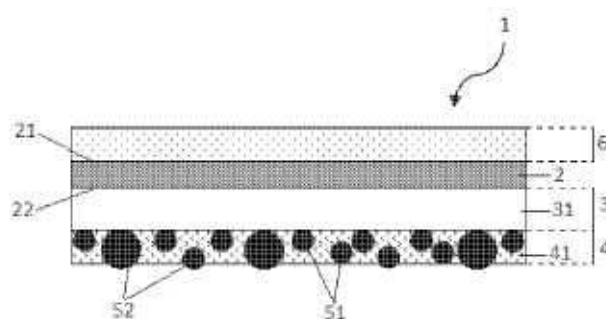


Fig. 4

- TI - CULINARY UTENSIL PROVIDED WITH A HYBRID COATING AND PROCESS FOR PRODUCING SUCH A UTENSIL
- AB - The present invention relates to a utensil comprising a support having two opposite faces, at least one of which is provided with a sol-gel coating comprising at least one **sol gel** layer that is present in the form of a continuous film of a **sol gel** material comprising a matrix of at least one metal polyalkoxylate. Said utensil additionally comprises a hybrid **sol gel** coating comprising at least one screen-printed hybrid **sol gel** layer completely or partially covering said **sol gel** coating, said first hybrid **sol gel** layer consisting of a hybrid **sol gel** material comprising a matrix formed from a first hybrid **sol gel composition** comprising at least one silicone resin and at least one silane and/or at least one metal alkoxide. The present invention also relates to a process for producing such a utensil.

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- PN - [EP2889097](#) A1 20150701
- PNFP - EP2889097 B1 20160629
- PR - GB20100014706 20100903; EP20110755419 20110902
- AP - EP20140194178 20110902
- DT - \*\*
- CT - || STSE (A1)  
[US2009101865](#) A1 20090423 [AD] (MATSUBARA KEIKO [JP], et al)  
 [AD] 1-15  
 \* paragraph [0006] - paragraph [0008] \*  
 \* paragraph [0012] - paragraph [0019] \*  
 \* paragraph [0042] - paragraph [0044] \*  
 \* paragraph [0047] \*  
 \* paragraph [0051] - paragraph [0054] \*  
 \* claims 1-3 \*;

[JP2005310759](#) A 20051104 [A] (SHINETSU CHEMICAL CO)

[A] 1-15

\* abstract \*;

[WO2005113467](#) A1 20051201 [A] (PSIMEDICA LTD [GB], et al)

[A] 1-15

\* page 3, lines 26-32 \*

\* page 8, lines 28-34 \*

\* page 10, lines 27-32 \*

\* page 13, lines 20-34 \*

\* page 18, lines 16-32 \*

\* page 29, lines 23-26 \*

\* claims 1, 16, 17 \*;

[US2004166319](#) A1 20040826 [AD] (LI YUNJUN [US], et al)

[AD] 1-15

\* paragraph [0014] \*

\* paragraph [0030] - paragraph [0031] \*

\* claims 1, 2, 10, 11, 13 \*

CCI - [B22F9/04](#) ; [C01B33/02](#) ; [C30B29/06](#) ; [C30B29/60](#) ; [H01M4/134](#) ; [H01M4/386](#)

CQI - [H01M4/04](#)

CLC - [B22F2999/00](#) , [B22F1/0055](#) , [C22C1/08](#) , [B22F2304/10](#) , ADD

CCA - [H01M4/0404](#) ; [B22F2999/00](#) ; [H01M2004/021](#) ; [H01M2004/027](#)

PA - (A1 B1)  
NEXEON LTD [GB]

TI - (A1 B1)  
Method of making a porous electroactive material

AB - (A1)

The invention provides a method of making a **composition** comprising electroactive porous particle fragments, the porous particle fragments comprising an electroactive material selected from the group consisting of silicon, tin, germanium, mixtures thereof and alloys thereof, the method comprising: a) forming porous particles using a method comprising at least one of: i) a **solgel** formation method; ii) injecting gases into a cooling molten mass comprising the electroactive material or alloy thereof; and iii) etching particles comprising the electroactive material or an alloy thereof; and b) deriving fragments from said porous particles, wherein said fragments are selected from the group consisting of: i) pore-containing porous particle fragments comprising a network of pores, cavities and channels, which pores, cavities and channels are separated and defined by electroactive material-containing walls within the particle structure; ii) fractals comprising a substantially irregular shape or surface morphology derived from the electroactive material originally defining or bounding the pores or network of pores within the porous particles from which the fractals are derived without themselves comprising pores, channels or a network of pores or channels; or iii) fractals having a substantially irregular shape or surface morphology derived from electroactive material originally defining a random or ordered network of linear, branched or layered elongate elements, wherein one or more discrete or interconnected void spaces or channels are defined between the elongate elements of the network. The invention also relates an electrode comprising a current collector, a composite electrode material and a binder, the composite electrode material being applied,

bonded, adhered or connected to the current collector, wherein the composite electrode material comprises a **composition** made according to the claimed method.

**4/15** © EPODOC / EPO

- PN - [US2011015088](#) A1 20110120
- PR - US20100819830 20100621; US20060598306 20061113; US20020287442 20021101; US20010336045P 20011101
- AP - US20100819830 20100621
- DT - \*\*
- CT - || R141 (A1)  
[US5741654](#) A [ ];  
[US6573369](#) B2 [ ];  
[US5552270](#) A [ ];  
[US6171856](#) B1 [ ];  
[US6153380](#) A [ ];  
[US5858666](#) A [ ];  
[US5948621](#) A [ ];  
[US5563056](#) A [ ]
- CTNP - || R141 (A1)  
[ ] Livage et al., "Encapsulation of biomolecules in silica gels", Journal of Physics: Condensed Matter, Vol. 13, pp. R673-R691, (2001)
- CCI - [B01J19/0046](#) ; [B01J19/0093](#) ; [B01L3/5085](#)
- CCA - [B01L3/5027](#) ; [B01J2219/00317](#) ; [B01J2219/00364](#) ; [B01J2219/00497](#) ;  
[B01J2219/00527](#) ; [B01J2219/00533](#) ; [B01J2219/00536](#) ; [B01J2219/00585](#) ;  
[B01J2219/00596](#) ; [B01J2219/00644](#) ; [B01J2219/00691](#) ; [B01J2219/0072](#) ;  
[B01J2219/00722](#) ; [B01J2219/00725](#) ; [B01J2219/00743](#) ; [B01J2219/00835](#) ;  
[B01J2219/00837](#) ; [B01J2219/0086](#) ; [B01L2300/069](#) ; [B01L2300/0819](#) ; [B01L2300/0829](#)
- PA - RENSSLAER POLYTECH INST [US]; UNIV CALIFORNIA [US]
- TI - BIOCATALYTIC **SOLGEL** MICROARRAYS
- AB - A system and method for conducting high-throughput interactions between test compositions and analytes, comprising one or more test compositions, and a plurality of independent micromatrices, wherein each said micromatrix encapsulates at least one said test **composition**; and said micromatrices are made of a material that is permeable to an analyte.

**5/15** © EPODOC / EPO

- PN - [EP2287330](#) A1 20110223
- PR - EP20020789399 20021101; US20010336045P 20011101
- AP - EP20100184058 20021101
- DT - \*\*
- CT - || STSE (A1)  
[US5770721](#) A 19980623 [X] (ERSHOV GENNADY MOISEEVICH [RU], et al)  
[X] 1-15  
\* column 2, line 12 - line 56 \*;

[US5948621](#) A 19990907 [A] (TURNER DAVID C [US], et al)  
 [A] 1-15  
 \* column 1, line 45 - column 2, line 7 \*;  
[US5563056](#) A 19961008 [A] (SWAN DALE G [US], et al)  
 [A] 1-15  
 \* the whole document \*;  
[US5858666](#) A 19990112 [A] (WEISS PAUL S [US])  
 [A] 1-15  
 \* the whole document \*;  
[WO0065097](#) A1 20001102 [A] (BIOCEPT INC [US], et al)  
 [A] 1-15  
 \* the whole document \*;  
[WO0101143](#) A2 20010104 [A] (MOTOROLA INC [US], et al)  
 [A] 1-15  
 \* page 6, line 20 - page 7, line 15 \*;  
[WO0031148](#) A2 20000602 [A] (MOTOROLA INC [US], et al)  
 [A] 1-15  
 \* the whole document \*

CCI - [B01J19/0046](#) ; [B01J19/0093](#) ; [B01L3/5085](#)

CCA - [B01L3/5027](#) ; [B01J2219/00317](#) ; [B01J2219/00364](#) ; [B01J2219/00497](#) ;  
[B01J2219/00527](#) ; [B01J2219/00533](#) ; [B01J2219/00536](#) ; [B01J2219/00585](#) ;  
[B01J2219/00596](#) ; [B01J2219/00644](#) ; [B01J2219/00691](#) ; [B01J2219/0072](#) ;  
[B01J2219/00722](#) ; [B01J2219/00725](#) ; [B01J2219/00743](#) ; [B01J2219/00835](#) ;  
[B01J2219/00837](#) ; [B01J2219/0086](#) ; [B01L2300/069](#) ; [B01L2300/0819](#) ; [B01L2300/0829](#)

PA - RENSSLAER POLYTECH INST [US]; UNIV CALIFORNIA [US]

TI - Biocatalytic **Solgel** Microarrays

AB - A system and method for conducting high-throughout interactions between text compositions and analytes, comprising one or more test compositions, and a plurality of independent micromatrices, wherein each said micromatrix encapsulates at least one said test **composition**; and said micromatrices are made up of material that is permeable to an analyte.

**6/15** © EPODOC / EPO

PN - [US2007059779](#) A1 20070315

PNFP - US7846747 B2 20101207

PR - US20060598306 20061113; US20020287442 20021101; US20010336045P 20011101

AP - US20060598306 20061113

DT - \*\*

CT - || STSE (B2)  
[US4307070](#) A 19811222 [ ] (TECHNICON INSTR)  
[US5512474](#) A 19960430 [ ] (BSI CORP [US])  
[US5552270](#) A 19960903 [ ] (INST MOLEKULARNOI BIOLOG IM V [RU])  
[US5763430](#) A 19980609 [ ] (MAGAININ PHARMA [US])  
[US5783431](#) A 19980721 [ ] (CHROMAXOME CORP [US])  
[US6017760](#) A 20000125 [ ] (RHODE ISLAND HOSPITAL [US])  
[US6153380](#) A 20001128 [ ] (RIGEL PHARMACEUTICALS INC [US], et al)

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <p><a href="#">US6171856</a> B1 20010109 [ ] (UNIV TEXAS [US], et al)</p> <p><a href="#">US6573369</a> B2 20030603 [ ] (BIOFORCE NANOSCIENCES INC [US])</p> <p><a href="#">US6660481</a> B2 20031209 [ ] (OSTEOMETER BIOTECH AS [DK])</p> <p><a href="#">US6780584</a> B1 20040824 [ ] (NANOGEN INC [US])</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      | <p>-    R141 (A1)</p> <p><a href="#">US6017760</a> A [ ];</p> <p><a href="#">US6171856</a> B1 [ ];</p> <p><a href="#">US2002015952</a> A1 [ ];</p> <p><a href="#">US2002020931</a> A1 [ ];</p> <p><a href="#">US3650900</a> A [ ];</p> <p><a href="#">US2002028506</a> A1 [ ];</p> <p><a href="#">US5200334</a> A [ ];</p> <p><a href="#">US5512474</a> A [ ];</p> <p><a href="#">US5618933</a> A [ ];</p> <p><a href="#">US6051380</a> A [ ];</p> <p><a href="#">US5763430</a> A [ ];</p> <p><a href="#">US5770721</a> A [ ];</p> <p><a href="#">US6573369</a> B2 [ ];</p> <p><a href="#">US5783431</a> A [ ];</p> <p><a href="#">US6780584</a> B1 [ ];</p> <p><a href="#">US5552270</a> A [ ];</p> <p><a href="#">US5824526</a> A [ ];</p> <p><a href="#">US6303290</a> B1 [ ];</p> <p><a href="#">US6153380</a> A [ ];</p> <p><a href="#">US4307070</a> A [ ];</p> <p><a href="#">US5474915</a> A [ ];</p> <p><a href="#">US2001055797</a> A1 [ ];</p> <p><a href="#">US6660481</a> B2 [ ]</p> |
| CTNP | <p>-    STSE (B2)</p> <p>[ ] Livage et al., "Encapsulation of biomolecules in silica gels", Journal of Physics: Condensed Matter, vol. 13, pp. R673-R691, (2001)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| CCI  | - <a href="#">B01J19/0046</a> ; <a href="#">B01J19/0093</a> ; <a href="#">B01L3/5085</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CCA  | <p>- <a href="#">B01L3/5027</a> ; <a href="#">B01J2219/00317</a> ; <a href="#">B01J2219/00364</a> ; <a href="#">B01J2219/00497</a> ;</p> <p><a href="#">B01J2219/00527</a> ; <a href="#">B01J2219/00533</a> ; <a href="#">B01J2219/00536</a> ; <a href="#">B01J2219/00585</a> ;</p> <p><a href="#">B01J2219/00596</a> ; <a href="#">B01J2219/00644</a> ; <a href="#">B01J2219/00691</a> ; <a href="#">B01J2219/0072</a> ;</p> <p><a href="#">B01J2219/00722</a> ; <a href="#">B01J2219/00725</a> ; <a href="#">B01J2219/00743</a> ; <a href="#">B01J2219/00835</a> ;</p> <p><a href="#">B01J2219/00837</a> ; <a href="#">B01J2219/0086</a> ; <a href="#">B01L2300/069</a> ; <a href="#">B01L2300/0819</a> ; <a href="#">B01L2300/0829</a></p>                                                                                                                                                                                                                                                     |
| PA   | <p>- (B2)</p> <p>RENSSELAER POLYTECH INST [US]; UNIV CALIFORNIA [US]</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| TI   | <p>- (A1 B2)</p> <p>Biocatalytic <b>solgel</b> microarrays</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| AB   | <p>- (A1 B2)</p> <p>A system and method for conducting high-throughput interactions between test compositions and analytes, comprising one or more test compositions, and a plurality of independent micromatrices, wherein each said micromatrix encapsulates at least one said test <b>composition</b>; and said micromatrices are made of a material that is permeable to an analyte.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

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- PN - [US2003162284](#) A1 20030828
- PNFP - US7267958 B2 20070911
- PR - US20020287442 20021101; US20010336045P 20011101
- AP - US20020287442 20021101
- DT - \*\*
- CT - || STSE (B2)  
[US5552270](#) A 19960903 [ ] (KHRAPKO KONSTANTIN R [RU], et al)  
[US6573369](#) B2 20030603 [ ] (HENDERSON ERIC [US], et al)  
[US6780584](#) B1 20040824 [ ] (EDMAN CARL F [US], et al)  
- || R141 (A1)  
[US6017760](#) A [ ];  
[US2002015952](#) A1 [ ];  
[US2002020931](#) A1 [ ];  
[US3650900](#) A [ ];  
[US2002028506](#) A1 [ ];  
[US5200334](#) A [ ];  
[US5618933](#) A [ ];  
[US6051380](#) A [ ];  
[US5763430](#) A [ ];  
[US6573369](#) B2 [ ];  
[US6780584](#) B1 [ ];  
[US5552270](#) A [ ];  
[US5824526](#) A [ ];  
[US6303290](#) B1 [ ];  
[US5474915](#) A [ ];  
[US5854030](#) A [ ];  
[US2001055797](#) A1 [ ];  
[US6660481](#) B2 [ ]
- CTNP - || STSE (B2)  
[ ] Livage et al., "Encapsulation of biomolecules in silica gels", Journal of Physics; Condensed Matter, vol. 13, pp. R673-R69, (2001)  
[ ] Buters et al., "cDNA-Directed Expression of Human Cytochrome p450 CYP1A1 using Baculovirus . . . ", Drug Metabolism and Disposition, vol. 23, No. 7, pp. 696-701, (1995)
- CCI - [B01J19/0046](#) ; [B01J19/0093](#) ; [B01L3/5085](#)
- CCA - [B01L3/5027](#) ; [B01J2219/00317](#) ; [B01J2219/00364](#) ; [B01J2219/00497](#) ;  
[B01J2219/00527](#) ; [B01J2219/00533](#) ; [B01J2219/00536](#) ; [B01J2219/00585](#) ;  
[B01J2219/00596](#) ; [B01J2219/00644](#) ; [B01J2219/00691](#) ; [B01J2219/0072](#) ;  
[B01J2219/00722](#) ; [B01J2219/00725](#) ; [B01J2219/00743](#) ; [B01J2219/00835](#) ;  
[B01J2219/00837](#) ; [B01J2219/0086](#) ; [B01L2300/069](#) ; [B01L2300/0819](#) ; [B01L2300/0829](#)
- PA - (B2)  
UNIV CALIFORNIA [US]

- TI - (A1 B2)  
Biocatalytic **solgel** microarrays
- AB - (A1 B2)  
A system and method for conducting high-throughput interactions between test compositions and analytes, comprising one or more test compositions, and a plurality of independent micromatrices, wherein each said micromatrix encapsulates at least one said test **composition**; and said micromatrices are made of a material that is permeable to an analyte.

**8/15** © EPODOC / EPO

- PN - [WO03038131](#) A1 20030508
- PR - US20010336045P 20011101
- AP - WO2002US35279 20021101
- DT - \*\*
- CT - |US| ISR (A1)  
[WO0054882](#) A1 20000921 [X] (ARTLOON CORP [US], et al);  
[US6051380](#) A 20000418 [X] (SOSNOWSKI RONALD G [US], et al);  
[US2002015952](#) A1 20020207 [XP] (ANDERSON NORMAN G [US], et al)
- CCI - [B01J19/0046](#) ; [B01J19/0093](#) ; [B01L3/5085](#)
- CCA - [B01L3/5027](#) ; [B01J2219/00317](#) ; [B01J2219/00364](#) ; [B01J2219/00497](#) ;  
[B01J2219/00527](#) ; [B01J2219/00533](#) ; [B01J2219/00536](#) ; [B01J2219/00585](#) ;  
[B01J2219/00596](#) ; [B01J2219/00644](#) ; [B01J2219/00691](#) ; [B01J2219/0072](#) ;  
[B01J2219/00722](#) ; [B01J2219/00725](#) ; [B01J2219/00743](#) ; [B01J2219/00835](#) ;  
[B01J2219/00837](#) ; [B01J2219/0086](#) ; [B01L2300/069](#) ; [B01L2300/0819](#) ; [B01L2300/0829](#)
- PA - RENSSLAER POLYTECH INST [US]; UNIV CALIFORNIA AT BERKELEY [US]
- TI - BIOCATALYTIC **SOLGEL** MICROARRAYS
- AB - A system and method for conducting high-throughput interactions between test compositions and analytes, comprising one or more test compositions, and a plurality of independent micromatrices, wherein each said micromatrix encapsulates at least one said test **composition**; and said micromatrices are made of a material that is permeable to an analyte.

**9/15** © EPODOC / EPO

- PN - [RU2005133318](#) A 20070510
- PNFP - RU2325425 C2 20080527
- PR - RU20050133318 20051028
- AP - RU20050133318 20051028
- DT - I
- PA - (C2)  
OOO NPP KHIM KOMPOZITSIONNYE M [RU]
- TI - (C2)  
PYROLYSIS OF PROPANE-BUTANE HYDROCARBON GAS WITH HIGH ETHYLENE YIELD AND WITHOUT COKE ACCUMULATION
- AB - (C2)

FIELD: organic chemistry. ^ SUBSTANCE: invention refers to lower olefins production and can be applied in chemistry and petrochemical industry, specifically to pyrolysis of propane-butane hydrocarbon gas used for ethylene production. Pyrolysis of propane-butane hydrocarbon gas implies that treatment of reactor surface with aqueous suspensions or zinc, cadmium and phosphorus compound solutions (**solgel** method), surface drying at 80-100C and thermal treatment 250-450C during 3-4 hours result in surface protective coating of weight to 70-100 g/m and gross-**composition** (mole %): P2O5 40-50, ZnO/CdO 50-40, and additionally admixtures of ferric oxide, chrome oxide, nickel oxide produced owe to reactor metal formulation at coating thermal treatment. Technical effect of pyrolysis of propane-butane hydrocarbon gas implies ethylene yield to 50-60% without coke accumulation at 770-850 C. ^ EFFECT: production of propane-butane hydrocarbon gas with high ethylene yield without coke accumulation. ^ 10 ex, 1 tbl

**10/15** © EPODOC / EPO

PN - [JPH0941159](#) A 19970210  
 PR - JP19950196550 19950801  
 AP - JP19950196550 19950801  
 DT - I  
 FI - C08L85/00; C08L85/00+LSA; C23F1/00&A; C23F4/04; G02B3/08; G03F7/20&521; H01L21/30&502R  
 FT - 4K057/DA11; 4K057/DA13; 4K057/DB17; 4K057/DD10; 4K057/WA10; 4K057/WA11; 4K057/WA13; 4K057/WB17; 4K057/WC08; 4K057/WD01; 4K057/WE11; 4K057/WE17  
 PA - MITSUBISHI MATERIALS CORP  
 TI - **COMPOSITION** FOR FORMATION OF POSITIVE METAL OXIDE THIN FILM PATTERN AND FORMING METHOD OF POSITIVE METAL OXIDE THIN FILM PATTERN  
 AB - PROBLEM TO BE SOLVED: To form a positive metal oxide thin film pattern by a **solgel** method. SOLUTION: This compsn. for formation of a positive metal oxide thin film pattern contains a metal alkoxide and a compd. which generates an etching assistant by irradiation of light. The compsn. is applied on a substrate and irradiated with light so that the difference in the solubility between the irradiated part and the non-irradiated part due to the photolytic reaction in the irradiated part is used for patterning. The metal alkoxide reacts with the etching assistant produced by irradiation of light and changed to be soluble with a solvent. In the irradiated part, the metal alkoxide becomes soluble with a solvent, while in the non-irradiated part, a hydrolyzable metal alkoxide is hydrolyzed with the water content in air to produce a metal hydroxide which is insoluble with the solvent. By developing the film with a solvent after irradiation of light, only the irradiated part is dissolved and removed, while the non-irradiated part remains to form a positive metal oxide thin film pattern.

**11/15** © EPODOC / EPO

PN - [JP2000128645](#) A 20000509  
 PR - US19980062179 19980417  
 AP - JP19990095971 19990402  
 DT - I  
 CCI - [C04B41/009](#) ; [C04B41/5025](#)

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CLC | - <a href="#">C04B41/5025</a> , <a href="#">C04B41/4535</a> , <a href="#">C04B41/49</a> , INV<br>- <a href="#">C04B41/009</a> , <a href="#">C04B35/00</a> , INV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CCA | - <a href="#">C04B2111/00112</a> ; <a href="#">C04B2201/10</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| FI  | - C01B13/32; C04B35/00; C04B35/00&D; C04B35/00&E; C04B35/00&G; C04B35/00&J;<br>C04B35/622; C04B35/624; C09D5/00&Z                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| FT  | - 4G030/AA13; 4G030/AA16; 4G030/AA17; 4G030/AA20; 4G030/AA40; 4G030/BA10;<br>4G030/CA08; 4G030/GA04; 4G030/GA08; 4G030/GA10; 4G030/GA11; 4G030/GA14;<br>4G030/GA17; 4G030/GA27; 4G030/PA22; 4G042/DA02; 4G042/DB10; 4G042/DB11;<br>4G042/DC03; 4G042/DD02; 4G042/DE09; 4J038/AA011; 4J038/HA156; 4J038/HA211;<br>4J038/HA216; 4J038/HA241; 4J038/HA566; 4J038/JA19; 4J038/JA20; 4J038/JA23;<br>4J038/JA37; 4J038/JA47; 4J038/JC38; 4J038/MA07; 4J038/MA09; 4J038/MA14;<br>4J038/MA15; 4J038/NA01; 4J038/PA19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| PA  | - SSI TECHNOL INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| TI  | - <b>SOLGEL</b> BINDER SOLUTION AND SOLUTION DEPOSITION THEREWITH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| AB  | - PROBLEM TO BE SOLVED: To produce a crack-less and thick ceramic film by forming on a substrate the coating film of a coating <b>composition</b> prepared by adding a specific amount of ceramic powder to an organic metal <b>solgel</b> binder solution, and subsequently subjecting the coating film to a thermal cyclic treatment. SOLUTION: An organic metal <b>solgel</b> binder solution having a smaller viscosity than about 8 cp is prepared. The powder of a ceramic is added to the solution to prepare a coating <b>composition</b> . The powder of the ceramic is added in an amount of about 50-65 wt.% based on the total weight of the <b>composition</b> . The coating <b>composition</b> is coated on a substrate and subsequently subjected to a thermal cyclic treatment to produce the ceramic film on the substrate. Thereby, a single-layered ceramic film having a thickness of about 1-10 $\mu\text{m}$ is formed on the substrate. The pH of the <b>solgel</b> solution is preferably about 2-4, and the powder of lead zirconate titanate, etc., is preferably used as the powder of the ceramic. |

PN - [JP2000243920](#) A 20000908

PNFP - JP3456434B B2 20031014

PR - JP19990039736 19990218

AP - JP19990039736 19990218

DT - I

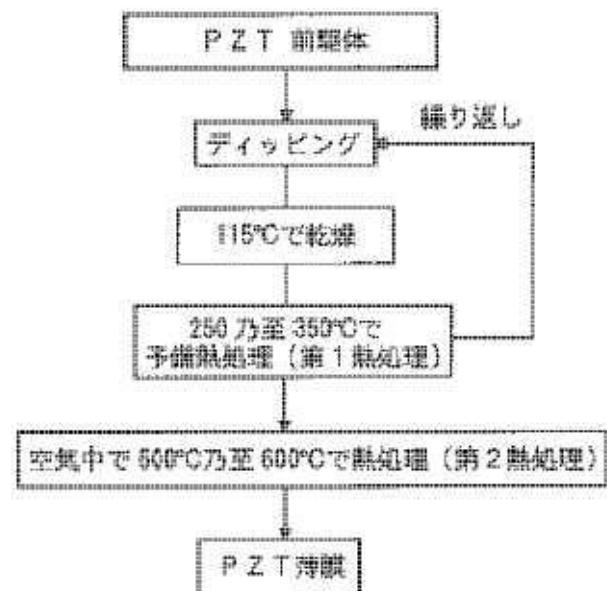
FI - H01B17/56&L; H01L27/04&C;  
H01L27/10&444C;  
H01L27/10&451;  
H01L27/10&621Z;  
H01L27/10&651;  
H01L27/108&621Z;  
H01L27/108&651; H01L27/115;  
H01L29/78&371

FT - 5F001/AA17; 5F001/AF06;  
5F001/AF07; 5F001/AF25;  
5F001/AG30; 5F001/AG40;  
5F001/AH10; 5F038/AC05;  
5F038/AC14; 5F038/AC18;  
5F038/DF05; 5F038/EZ17;  
5F038/EZ20; 5F083/FR00;  
5F083/GA29; 5F083/GA30;  
5F083/JA15; 5F083/JA38;  
5F083/JA43; 5F083/PR23;  
5F083/PR33; 5F083/ZA01;  
5F101/BA62; 5F101/BF02;  
5F101/BF03; 5F101/BF09;  
5F101/BG10; 5F101/BH16;  
5F101/BH21; 5G333/AA03;  
5G333/AB13; 5G333/AB21;  
5G333/BA01; 5G333/CB17;  
5G333/DA28

PA - (A)  
YAMAHA CORP

TI - (A)  
MANUFACTURE OF  
FERROELECTRIC MEMORY

AB - (A)  
PROBLEM TO BE SOLVED: To  
provide a method of  
manufacturing a ferroelectric  
memory with which a  
ferroelectric memory composed  
of a highly-oriented PZT (a  
perovskite- type ferroelectric)  
thin film can be formed on a  
(111) plane by low-temperature  
firing, and damage on the



transistors or the like formed in the same substrate can be avoided. SOLUTION: A substrate is coated with a **solgel** solution having a **composition**-of  $Pbx(Zr(1-y)Ti_y)O_3$  (where, x is 1.05 to 130, and y is 0.2 to 0.55), and after the **solgel** solution is dried, is heat-treated at a temperature of 250 to 300 deg.C (a first heat treatment process). The **solgel** solution coating process and the first heat treatment process are repeated several times. After then, the thin film is heat-treated at a temperature of 500 to 600 deg.C (a second heat treatment process).

**13/15** © EPODOC / EPO

PN - [EP0170295](#) A2 19860205

PNFP - EP0170295 A3 19861210

- EP0170295 B1 19900502

PR - US19820437786 19821029

AP - EP19850110293 19831010

DT - \*; Rep

CT - || STSE (A3)

[US4472510](#) A 19840918 [E] (JANUARY JAMES R [US]);

[US3927224](#) A 19751216 [A] (LEVENE LEON)

CTNP - || STSE (A3)

[XP] - CERAMIC ENGINEERING AND SCIENCE PROCEEDINGS, vol. 4, no. 9/10, September/October 1983, pages 704-717, Columbus, Ohio, US; F.K. CHI: "Carbon-containing monolithic glasses via the sol-gel process",

CCI - [C03C1/006](#) ; [C03C10/0009](#)

PA - (A2)

DOW CORNING [US]

TI - (A2)

Precursor for carbon-containing monolithic glasses.

- (A3)

CARBON-CONTAINING MONOLITHIC GLASSES PREPARED BY A SOL-GEL PROCESS

- (B1)

PRECURSOR FOR CARBON-CONTAINING MONOLITHIC GLASSES

AB - (A2)

A valuable intermediate for the preparation of carbon-containing monolithic glasses by **solgel** process is described which comprises a dispersion of a colloidal metal oxide or a mixture of colloidal metal oxide in a water-alcohol solution of the partial

condensate of a silanol having the formula  $\text{RSi(OH)}_3$  in which R is selected from the group consisting of alkyl radicals of 1 to 3 inclusive carbon atoms or the phenyl radical, or mixtures thereof. The **composition** contains 25 to 60 weight percent solids which themselves comprise 1 to 70 weight percent of colloidal oxide or mixtures thereof and 30 to 99 weight percent of the partial condensate. The metal oxides are selected from a group consisting essentially of (i)  $\text{ZrO}_2$ , (ii)  $\text{SnO}_2$ , (iii)  $\text{ZrSiO}_4$ , (iv)  $\text{B}_2\text{O}_3$  and (v)  $\text{La}_2\text{O}_3$ .

14/15 © EPODOC / EPO

- PN - [EP1826249](#) A1 20070829
- PNFP - EP1826249 B1 20081224
- PR - DE20061008534 20060222
- AP - EP20070003273 20070216
- DT - \*\*
- CT - || STSE (A1)  
[US2004134384](#) A1 20040715  
 [A] (MIHARA CHIEKO [JP], et al)  
 [A] 1-30  
 \* example 4 \*
- CCI - [C09D5/14](#) ; [C09D105/08](#)
- PA - (A1 B1)  
 STIFTUNG NANO INNOVATIONS  
 FOR [CH]
- TI - (A1 B1)  
 Utilisation of a coating  
 compound for a container lock,  
 container lock coating as  
 antibacterial agent, its  
 manufacture and application
- AB - (A1)  
 Use is claimed of a  
 coating **composition** containing  
 50-99.9 (especially 80-99) wt.%  
 of an agent obtained from  
 silicon dioxide, the **composition**  
 containing 0.1-50 (especially 1-  
 20) wt.% (on total weight) of an  
 antibacterial comprising a  
 cationic, anionic or nonionic  
 deacetylated chitosan  
 (derivative), a halogenated  
 dihydroxyphenyl-methane, -  
 sulfide or -ether and/or a  
 substituted quaternary  
 ammonium salt of an alkylated  
 phosphoric acid, such mixtures  
 containing 0-50 wt.% of a

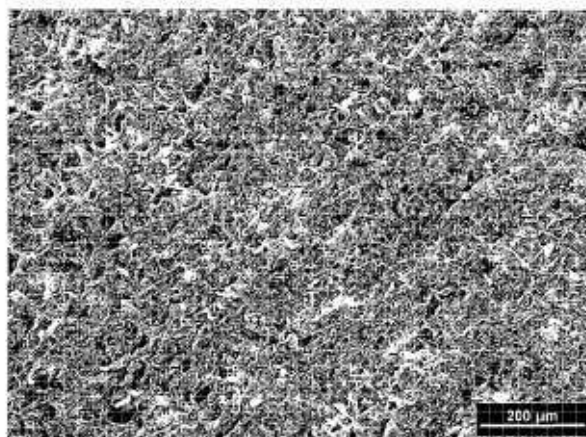


Fig.2

chitosan, a chitosan salt, an alkylated or acylated chitosan and/or crosslinked chitosan being excluded. An independent claim is also included for production of the **composition** by (1) forming a **solgel** with nanoscalar particles by a conventional hydrolysis of a precursor in water; and (2) adding an antimicrobial agent dissolved or dispersed in a hydrophilic solvent.

**15/15** © EPODOC / EPO

PN - [CA2466172](#) A1 20030508

PNFP - CA2466172 C 20100727

PR - US20010336045P 20011101; WO2002US35279 20021101

AP - CA20022466172 20021101

DT - I

CCI - [B01J19/0046](#) ; [B01J19/0093](#) ; [B01L3/5085](#)

CCA - [B01L3/5027](#) ; [B01J2219/00317](#) ; [B01J2219/00364](#) ; [B01J2219/00497](#) ; [B01J2219/00527](#) ; [B01J2219/00533](#) ; [B01J2219/00536](#) ; [B01J2219/00585](#) ; [B01J2219/00596](#) ; [B01J2219/00644](#) ; [B01J2219/00691](#) ; [B01J2219/0072](#) ; [B01J2219/00722](#) ; [B01J2219/00725](#) ; [B01J2219/00743](#) ; [B01J2219/00835](#) ; [B01J2219/00837](#) ; [B01J2219/0086](#) ; [B01L2300/069](#) ; [B01L2300/0819](#) ; [B01L2300/0829](#)

PA - (A1)  
RENSSELAER POLYTECH INST [US]; UNIV CALIFORNIA AT BERKELEY  
- (C)  
RENSSELAER POLYTECH INST [US]; UNIV CALIFORNIA [US]

TI - (A1 C)  
BIOCATALYTIC **SOLGEL** MICROARRAYS

AB - (A1 C)  
A system and method for conducting high-throughput interactions between test compositions and analytes, comprising one or more test compositions, and a plurality of independent micromatrices, wherein each said micromatrix encapsulates at least one said test **composition**; and said micromatrices are made of a material that is permeable to an analyte.