Abstract:

Title: DIELECTRIC SILANES POLYMER FILMS AND DEVICES HAVING THE SAME

An optical coating has a siloxane polymer and noble metal particles. The coating has an index of refraction that is different for in-plane and out-of-plane. The coating has reverse optical dispersion within the visible wavelength range, and preferably a maximum absorption peak between 400-1000 nm wavelength range is greater than 700 nm. In one example the metal particles are noble metal nanorods having an average particle width of less than 400 nm.
**A. CLASSIFICATION OF SUBJECT MATTER**

INV. G02B5/30

**ADD.**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

G02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
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<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>A</td>
<td>claims 1, 15 paragraphs [0085], [0088]</td>
<td>1-4, 38, 39</td>
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Further documents are listed in the continuation of Box C.

**X** See patent family annex.

**X**

* Special categories of cited documents:
  
  **A** document defining the general state of the art which is not considered to be of particular relevance
  
  **E** earlier application or patent but published on or after the international filing date
  
  **L** document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  
  **O** document referring to an oral disclosure, use, exhibition or other means
  
  **P** document published prior to the international filing date but later than the priority date claimed

Date of the actual completion of the international search

13 April 2017

Date of mailing of the international search report

25/04/2017

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040
Fax: (+31-70) 340-3016

Authorized officer

Le Masson, Nicolas
<table>
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<tr>
<td>X</td>
<td>EP 2 375 452 AI (FOM INST FOR ATOMIC AND MOLECULAR PHYSICS [NL]) 12 October 2011 (2011-10-12) claims 1, 4, 5, 10</td>
<td>16, 17</td>
</tr>
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</table>
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. **Claims Nos.:**
   because they relate to subject matter not required to be searched by this Authority, namely:

2. **Claims Nos.:**
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. **Claims Nos.:**
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. **As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.**

2. **As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.**

3. **As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:**

4. **No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:**

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- No protest accompanied the payment of additional search fees.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4, 38, 39

   An optical coating comprising:
   - a siloxane polymer; and
   - noble metal particles;

   wherein the coating has an index of refraction that is different for in-plane and out-of-plane.

2. claims: 5-37

   A display comprising:
   - an array of pixels; and
   - an optical coating for color compensation, widening of viewing angle and/or anti reflection;

   wherein the optical coating comprises a siloxane polymer, or wherein the optical coating comprises metal particles having a maximum average dimension less than 400nm.
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