Title: THE PRINTING INK APPLYING TO VARIOUS TEXTILE MATERIALS, THE PROCESS FOR PREPARING IT AND THE PRINTING METHOD USING IT

Abstract: The present invention relates to an inkjet printing ink which has good color developing property and fastness and a broad color gamut in printing various textile materials such as polyesters, cottons, silks, nylons, etc., knitted materials, particularly mixed fibers so that the product value of printed fiber products including garments can be increased, a process for preparation thereof, and a printing method using said ink. Moreover, the present invention provides an ink for inkjet printing suitable for polyester ultrafine microfibers and nylon/polyester ultrafine microfibers.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC7 C09B 62/02
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)
IPC7 C09B, C09C, C09D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Patents and Applications for invention since 1975

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<tr>
<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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<tbody>
<tr>
<td>Y A</td>
<td>US 4515716 A(MITSUBISHI CHEM. IND.) 7 MAY 1985, SEE THE WHOLE DOCUMENT</td>
<td>1, 7</td>
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<tr>
<td>Y A</td>
<td>US 4500455 A(MITSUBISHI CHEM IND) 19 FEBRUARY 1985, SEE THE WHOLE DOCUMENT</td>
<td>1, 7</td>
</tr>
<tr>
<td>Y A</td>
<td>JP62-010173 A(MITSUBISHI CHEM IND LTD) 19 JANUARY 1987, SEE THE WHOLE DOCUMENT</td>
<td>1, 7</td>
</tr>
<tr>
<td>A</td>
<td>JP61-247762 A(MITSUBISHI CHEM IND LTD) 5 NOVEMBER 1986, SEE THE WHOLE DOCUMENT</td>
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☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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Date of the actual completion of the international search

Date of mailing of the international search report

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WON, Ho Joon
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<tr>
<td>US4515716A</td>
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<td>US4515716A</td>
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