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**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

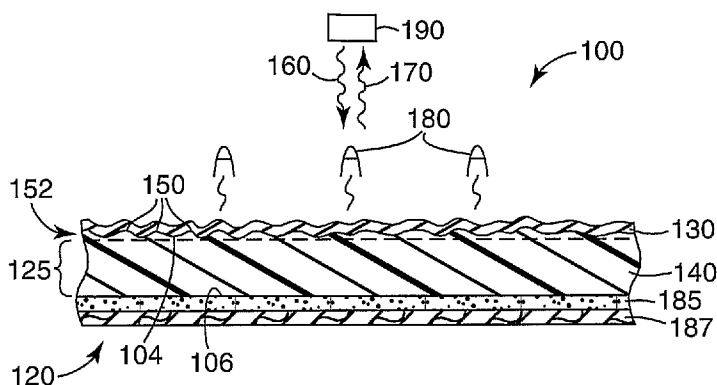
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SURFACE-ENHANCED SPECTROSCOPIC METHOD, FLEXIBLE STRUCTURED SUBSTRATE, AND METHOD OF MAKING THE SAME



(57) Abstract: The application is directed to a flexible polymer substrate (100) for use in surface enhanced Raman spectroscopy (SERS) and surface plasmon resonance (SPR) measurements. The substrate comprises a polymer film (125) with nanostructured features (152) embossed on one surface and covered with a metallised layer (130), made from gold, silver etc., to produce a SERS-active surface. A method of manufacturing the device is described and applications include DNA sensing.

## INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER  
 INV. G01N21/65 G01N21/55

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)

G01N

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 practical, search terms used)

EPO-Internal, WPI Data, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 674 878 A (VO-DINH T) 23 June 1987 (1987-06-23)	1,7,8, 10-13, 16-18, 21-23, 25,26
Y	column 3, line 60 - column 5, line 33 figures 1-6; example 1 ----- -/--	2-5,9, 14,15, 19,20, 27,28, 30-33

☒ 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

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/187170 A1 (BURMEISTER A) 2 October 2003 (2003-10-02)  paragraph [0033] - paragraph [0039] paragraph [0140] claim 1; figures 1,2; example 1 -----	2-5,9, 19,20, 27,28, 30-33
Y	US 2003/059954 A1 (VIKHOLM I ET AL) 27 March 2003 (2003-03-27) paragraph [0029] - paragraph [0035]; figures 1-3 -----	14,15
Y	US 5 255 067 A (CARRABBA M M ET AL) 19 October 1993 (1993-10-19)  column 3, line 35 - column 7, line 30 figures 1,2,7 -----	1-7, 10-14, 16,17, 20-25, 27-31,33
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A	LU Y ET AL: "High-density silver nanoparticle film with temperature-controllable interparticle spacing for a tunable surface enhanced Raman scattering substrate" NANO LETTERS, vol. 5, no. 1, January 2005 (2005-01), pages 5-9, XP002410125 ISSN: 1530-6984 the whole document -----	1,7, 10-14, 16,17, 21,25, 27,28

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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