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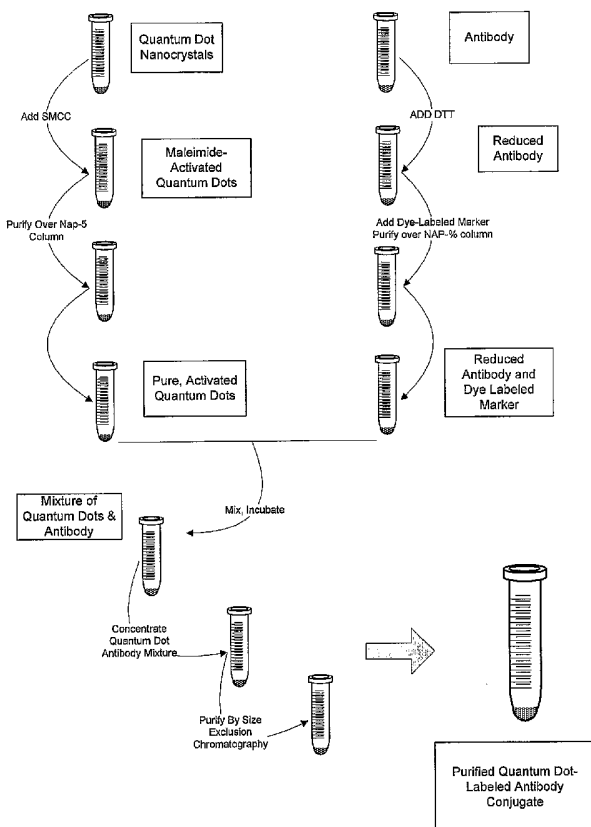
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(54) Title: LUMINESCENCE CHARACTERIZATION OF QUANTUM DOTS CONJUGATED WITH BIOMARKERS FOR EARLY CANCER DETECTION



(57) Abstract: Luminescent semiconductor quantum dots (QDs) conjugated with biomolecules to serve as sensitive probes for early detection of the cancer cells, specifically for ovarian cancer and lung cancer, which represents the most lethal malignancies. The luminescence characterization of the bin-conjugated QDs with cancer specific antigens using linkage molecules. Photo-enhancement is measured at various laser density power, temperatures and laser wavelengths.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/23763

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G01N 33/553(2006.01)

USPC: 436/525

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)
U.S. : 436/64, 525

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)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,423,551 B1 (WEISS et al) 23 July 2002 (23.07.2002), see entire document.	1-26
Y	US 5,320,956 A (WILLINGHAM et al) 14 June 1994 (14.06.1994), see entire document.	1-26

Further documents are listed in the continuation of Box C.

See patent family annex.

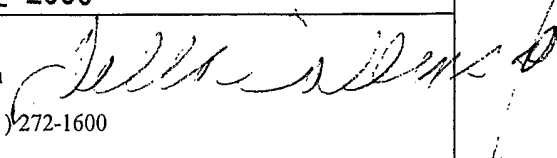
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"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: quantum dot, nanoparticle, nanocrystal, cancer, cell lung carcinoma, lung cancer, ovarian cancer, antibody