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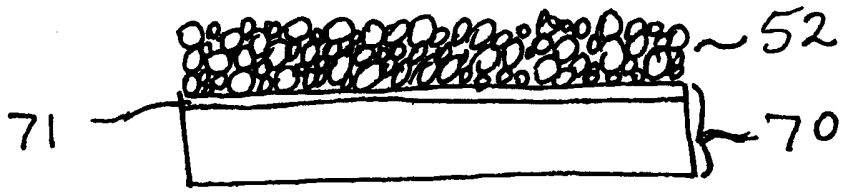
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8 April 2004

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: METHOD OF FORMING SEMICONDUCTOR COMPOUND FILM FOR FABRICATION OF ELECTRONIC DEVICE AND FILM PRODUCED BY SAME



(57) Abstract: A process of forming a compound film includes formulating a nano-powder material with a controlled overall composition and including particles of one solid solution. The nano-powder material is deposited on a substrate (70) to form a layer (52) on the substrate, and the layer is reacted in at least one suitable atmosphere to form the compound film. The compound film may be used in fabrication of a radiation detector or solar cell.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US02/11047

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01L 21/00, 21/31, 21/44; B32B 5/16, 18/00
US CL : 438/93, 687; 428/698, 570; 429/12; 427/74

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. : 438/93, 94, 687, 767, 779; 428/698, 570; 429/12; 427/74, 96

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
None

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.
A	US 5,665,277 A (JOHNSON et al) 09 September 1997 (09.09.1997), entire document.	1-63
A	US 5,874,684 A (PARKER et al) 23 February 1999 (23.02.1999), entire document.	1-63
A,E	US 6,576,355 B2 (YADAV et al) 10 June 2003 (10.06.2003), entire document.	1-63
A,E	US 6,616,794 B2 (HARTMAN et al) 09 September 2003 (09.09.2003), entire document.	1-63
A,E	US 6,630,257 B2 (YE et al) 07 October 2003 (07.10.2003), entire document.	1-63
A,E	US 6,635,307 B2 (HUANG et al) 21 October 2003 (21.10.2003), entire document.	1-63

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
04 February 2004 (04.02.2004)	20 FEB 2004
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Amir Zarabian Telephone No., 703-306-0956

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Continuation of B. FIELDS SEARCHED Item 3:
EAST
The above subsclasses and submicron, nanomicron, nano-powder, copper, gallium
Search Items: