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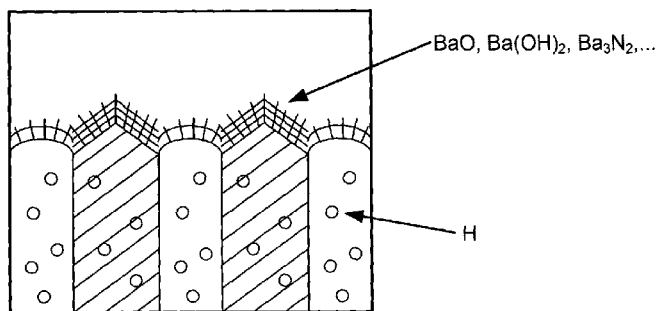
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- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

[Continued on next page]

(54) Title: LITHIUM OR BARIUM BASED FILM GETTERS



(57) Abstract: Two film materials, one of them with the
structure of barium eutectic and another one with the
structure of lithium solid solution, manufactured by thermal
deposition. The mentioned films may give a freedom
of choice of the sealing methods starting from the stan-
dard bonding processes with heating under vacuum or un-
der inert gas to common gluing at, or around, room tem-
perature in conditions such as: CO₂ environment under
the pressure of atm.

Fig.1



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2009/000723

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - H01L 33/00 (2010.01)
 USPC - 257/682
 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)
 IPC(8) - H01L 33/00 (2010.01)
 USPC - 257/79, 678, 682; 423/210, 230

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)
 PatBase, Google Scholar

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,998,648 B2 (SILVERNAIL) 14 February 2006 (14.02.2006) entire document	8-10
Y		1-7, 11, 15-17
Y	US 4,342,662 A (KIMURA et al) 03 August 1982 (03.08.1982) entire document	1-5, 15-17
Y	US 2005/0230691 A1 (AMIOTTI et al) 20 October 2005 (20.10.2005) entire document	2, 16
Y	US 5,312,607 A (SCHIABEL et al) 17 May 1994 (17.05.1994) entire document	4, 5
Y	US 2003/0062610 A1 (KOVACS et al) 03 April 2003 (03.04.2003) entire document	6, 7, 11
A	US 6,104,138 A (MARTELLI et al) 15 August 2000 (15.08.2000) entire document	1-17

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	
"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 but 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
"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)	"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
"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	

Date of the actual completion of the international search 19 November 2009	Date of mailing of the international search report 26 JAN 2010
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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. 571-273-3201	Authorized officer: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL2009/000723

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

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).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

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

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees need to be paid.

Group I, claims 1-11 and 15-17 are drawn to a barium-aluminum based film getter device and method.

Group II, claims 12-14 are drawn to a palladium-lithium based film getter device and method.

The inventions listed in Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1, because under PCT Rule 13.2 they lack the same or corresponding special technical features for the following reasons:

The special technical features of Group I, a getter device based on the chemical and physical characteristics of a barium-aluminum complex, are not present in Group II; and the special technical features of Group II, a getter device based on the chemical and physical characteristics of a palladium-lithium complex, are not present in Group I.

Since none of the special technical features of the Group I and II inventions are found in more than one of the inventions, unity is lacking.

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 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.:
1-11, 15-17

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- 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.
- No protest accompanied the payment of additional search fees.