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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))

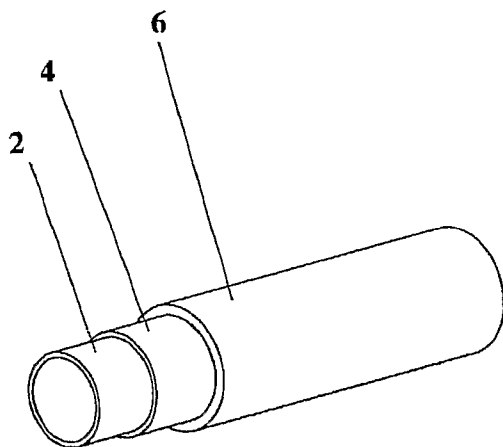
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(54) Title: COMPOSITES BASED ON MACRO AND NANOPOROUS MATERIALS



(57) Abstract: Embodiments of the present invention describe insulation systems comprising foam (6) and nanoporous aerogel (4) materials. Generally speaking, the insulation systems of the present invention may be employed for thermal management of essentially any surface or volume whether enclosed fully or partially. The aerogel materials may reside between a foam material(s) and the region(s) to be insulated, enclosed partially or fully in the foam material(s) or otherwise combined therewith.

WO 2006/107420 A3

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: F16L 9/14(2006.01)

USPC: 138/149,151,156

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. : 138/149, 151, 156

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0134556 A1 (MANINI et al) 15 July 2004 (15.07.04), entire document.	1-4, 6-12, 14 and 15
A	US 6216745 B1 (AUGUSTYNOWICZ et al) 17 April 2001 (17.04.2001), entire document.	1-15
A	US 6145547 A (VILLATTE) 14 November 2000 (14.11.2000), entire document.	1-15

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* 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 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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15 March 2007 (15.03.2007)

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