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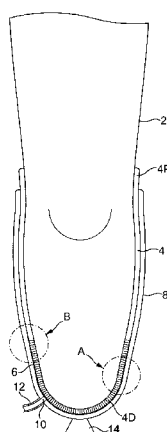
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(54) Title: VACUUM-ASSISTED LINER SYSTEM

FIG. 1



(57) **Abstract:** A vacuum-assisted liner system for the socket of a limb prosthesis secures the prosthesis to a residual body portion. A vacuum is created directly between the residual body portion and the socket (8) to hold them together and minimise relative movement between them. The system includes a flexible liner (4) made of an impermeable material, at least a distal part (4D) of the liner being porous to allow the transport of air and fluid directly away from the residual body portion to the outer surface of the liner. A fabric distribution layer (6) is located over the liner (4) and between the liner and the socket (8) to allow transmission of such extracted air and fluid laterally over the liner to an evacuation port (10) in the socket. Also disclosed is a limb apparatus suspension device incorporating the liner system, and a vacuum suspension device which secures a component such as a stamp socket to a residual body portion by creating an evacuated space sealed by intimate contact directly between the socket (8) and a boundary region of the liner (4).

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61F2/80

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)
A61F

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2007/030609 A (KING CHARLES [US]) 15 March 2007 (2007-03-15) cited in the application abstract; figures paragraphs [0001], [0017], [0018], [0069], [0071], [0076] paragraphs [0101] - [0103], [0114], [0124], [0125] paragraphs [0150] - [0152] paragraphs [0177] - [0181]; figure 44	1-12
A	MASI J ET AL: "Active ventilation of above- and below-knee prosthetic devices" 19900326; 19900326 - 19900327, 26 March 1990 (1990-03-26), pages 25-26, XP010003124 the whole document ----- -/--	1-12

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

☒ See patent family annex.

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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.
A	US 3 309 714 A (LAURENCE PORTEN) 21 March 1967 (1967-03-21) figures column 2, lines 7-10 column 4, line 72 - column 7, line 30 -----	1-12
A	US 2 634 424 A (O'GORMAN THOMAS C) 14 April 1953 (1953-04-14) the whole document -----	1-12
A	US 2007/225824 A1 (EINARSSON PALMI [US]) 27 September 2007 (2007-09-27) abstract; figures paragraphs [0002], [0035], [0045], [0058] - [0061], [0073] -----	1-12

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2007030609	A	15-03-2007	NONE	
US 3309714	A	21-03-1967	NONE	
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