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(54) Title: POLYMER COMPOSITE MATERIAL STRUCTURES COMPRISING CARBON BASED CONDUCTIVE LOADS

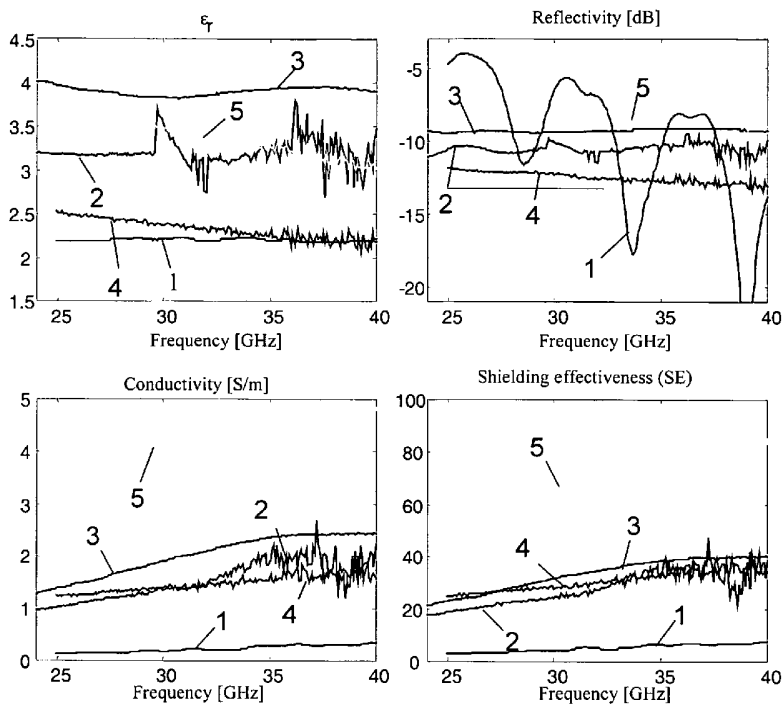


FIG. 3

(57) Abstract: The present invention provides a polymer composite material structure comprising at least one layer of a foamed polymer composite material comprising a foamed polymer matrix and 0.1 wt% to 6 wt% carbon based conductive loads, such as e.g. carbon nanotubes, dispersed in the foamed polymer matrix. The polymer composite material structure according to embodiments of the present invention shows good shielding and absorbing properties notwithstanding the low amount of carbon based conductive loads. The present invention furthermore provides a method for forming a polymer composite material structure comprising carbon based conductive loads.

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B. FIELDS SEARCHED

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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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE WPI Week 199724 Thomson Scientific, London, GB; AN 1997-265583 XP002436716 & JP 09 092996 A (MATSUSHITA ELECTRIC WORKS LTD) 4 April 1997 (1997-04-04) abstract	1, 4-7, 12, 14
Y	-----	3, 8, 10-12
X	DATABASE WPI Week 200124 Thomson Scientific, London, GB; AN 2001-228693 XP002436717 & JP 2000 294978 A (SEKISUI CHEM IND CO LTD) 20 October 2000 (2000-10-20) abstract	1, 13, 14

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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.
Y	<p>PARK ET AL: "Fabrication and electromagnetic characteristics of electromagnetic wave absorbing sandwich structures" COMPOSITES SCIENCE AND TECHNOLOGY, ELSEVIER, vol. 66, no. 3-4, March 2006 (2006-03), pages 576-584, XP005197026 ISSN: 0266-3538 page 578, paragraph 3.2 - page 579, paragraph 3.3</p> <p style="text-align: center;">-----</p>	<p>3,8, 10-12</p>

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
JP 9092996	A	04-04-1997	NONE
JP 2000294978	A	20-10-2000	NONE