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(54) Title: MOLDABLE MATRIX POLYMER MATERIAL AND METHOD FOR MAKING MOLDED COMPOSITE PRODUCT

(57) Abstract: A moldable matrix polymer material is disclosed which is useful for making reinforcing articles for use in the manufacture of molded composite articles. The moldable matrix polymer material comprises a moldable matrix polymer resin and a catalyst composition. The invention is also directed to a molded composite product made from the moldable matrix polymer material and a string binder.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C08J5/06 C08J3/24

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 7 C08J C08G

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, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 074 325 A (GOODYEAR TIRE & RUBBER) 16 March 1983 (1983-03-16) claims 1,3 example 1	1,3-5,9
A	US 4 006 048 A (CANNADY JR DANIEL L ET AL) 1 February 1977 (1977-02-01) claim 1	1
A	US 4 952 652 A (HATTA KEN ET AL) 28 August 1990 (1990-08-28) claims 1-10	1,6-8
P,X	WO 00 58233 A (OWENS CORNING FIBERGLASS CORP ;BECKMAN JAY J (US); HAGER WILLIAM G) 5 October 2000 (2000-10-05) claims 1,22,26-28 page 11, paragraph 1	1,3-5,9

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

☒ Patent family members are listed in annex.

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P document published prior to the international filing date but later than the priority date claimed

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

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

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.

Z document member of the same patent family

Date of the actual completion of the international search

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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
EP 0074325	A	16-03-1983	CA 1204909 A1	27-05-1986
			EP 0074325 A1	16-03-1983
			JP 58059067 A	07-04-1983
US 4006048	A	01-02-1977	CA 1077818 A1	20-05-1980
US 4952652	A	28-08-1990	JP 1054057 A	01-03-1989
			JP 1932014 C	12-05-1995
			JP 6062840 B	17-08-1994
WO 0058233	A	05-10-2000	AU 3924200 A	16-10-2000
			WO 0058233 A1	05-10-2000