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(54) Title: SHAPE MEMORY EPOXY COPOLYMERS

(57) Abstract: The shape memory polymers disclosed are a reaction product of at least one reagent containing two active amino-hydrogen or two active phenolic-hydrogen with at least one multifunctional cross linking reagent which contains at least three or more active amino- or phenolic-hydrogen or is a reagent containing at least three glycidyl ether moieties which is then further mixed with at least one diglycidyl ether reagent whereupon the resulting mixture is cured and has a glass transition temperature higher than 00C. This reaction creates crosslinking between the monomers and polymers such that during polymerization they form a crosslinked thermoset network.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/62179

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - C08L 67/00 (2007.01); C08G 63/91 (2007.01)
 USPC - 525/415
 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)
 USPC - 525/415

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC 528/76,272,80;525/415,440,450

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 PubWEST, Google Patents Database, Google Scholar Database
 (shape, memory, polymer, piperazine, aniline, epoxide, polymeric modifier)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X - Y	US 6,759,481 B2 (Tong) 6 July 2004 (06.07.2004) column 3, line 19-67, column 4, line 1-20, line 26-38, column 5, line 29-49	1-11 ----- 12-13
Y	US 5,189,110 A (Ikematu et al.) 23 February 1993 (23.02.1993) column 5, line 43-67, column 6, line 1-16	12-13

Further documents are listed in the continuation of Box C.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"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	
"P" document published prior to the international filing date but later than the priority date claimed	

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