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(54) Title: MODIFIED AMINOPLAST CROSSLINKERS AND POWDER COATING COMPOSITIONS CONTAINING SUCH CROSSLINKERS

(57) Abstract: The present invention provides a crosslinking agent which may have reactive benzoxazine groups prepared from (a) at least one aromatic compound, (b) at least one aminotriazine compound, and (c) at least one other compound having active hydrogen groups reactive with aminoplast compound (b). The crosslinking agent is essentially free of hydroxyl functionality and has a glass transition temperature of at least 25 °C. The present invention is further directed to a method for preparing the above-described crosslinking agent, and a curable powder coating composition comprising a mixture of (A) a polymer having functional groups reactive with aminotriazine and/or benzoxazine groups having a glass transition temperature of at least 30°C; and (B) the above crosslinking agent. Multilayer composite coating compositions are also provided, as are coated substrates.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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 C08G C09D

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	US 3 904 623 A (SHAY GREG D ET AL) 9 September 1975 (1975-09-09) cited in the application example 15 column 15, line 58 - line 67 -----	1, 29, 57, 129
X	US 3 778 413 A (WEISSENFELS F ET AL) 11 December 1973 (1973-12-11) example 2 -----	1, 29, 57, 129
A	US 2 749 324 A (WALTER HENRY A) 5 June 1956 (1956-06-05) column 3, line 10 - line 23 -----	1-132

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

☒ Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3904623	A	09-09-1975	NONE
US 3778413	A	11-12-1973	DE 1964961 A1 01-07-1971
US 2749324	A	05-06-1956	NONE