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(54) Title: ADHESIVE

(57) Abstract: General purpose permanent, environmentally benign, pressure-sensitive adhesives and self-adhesive postage stamps and other laminate constructions are provided. In one embodiment, the PSA is an inherently, acrylic copolymer prepared by emulsion polymerization of 27 to 29 % di-(2-ethylhexyl) maleate, 19 to 21 % vinyl acetate, 40 to 43 % ethylhexyl acrylate, 5 to 10 % methyl methacrylate, 1 % acrylic acid, and 1 % methacrylic acid. Notably, no multifunctional monomers having a cyanurate or phosphate moiety are included in the polymer, and the polymer is substantially uncrosslinked.



INTERNATIONAL SEARCH REPORT

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| A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C09J133/08 G09F3/10 | |
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| According to International Patent Classification (IPC) or to both national classific | cation and IPC |
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| Minimum documentation searched (classification system followed by classification $1PC \ 7 \ C09J$ | tion symbols) |
| Documentation searched other than minimum documentation to the extent that | such documents are included in the fields searched |
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| C. DOCUMENTS CONSIDERED TO BE RELEVANT | |
| Category ° Citation of document, with indication, where appropriate, of the re | elevant passages Relevant to claim No. |
| A WO 91 02759 A (AVERY INTERNATION 7 March 1991 (1991-03-07) claims | AL CORP) 1 |
| | |
| Further documents are listed in the continuation of box C. | Patent family members are listed in annex. |
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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 |
|--|---|------------------|-------------------------|------------|------------------|
| WO 9102759 | Α | 07-03-1991 | AU | 638480 B | 01-07-1993 |
| | | | AU | 6162290 A | 03-04-1991 |
| | | | CA | 2044169 A | 15-02-1991 |
| | | | DE | 69008334 D | 26-05-1994 |
| | | | DE | 69008334 T | 03-11-1994 |
| | | | EP | 0442983 A | 28-08-1991 |
| | | | US | 5164444 A | 17-11-1992 |
| | | | US | 5183459 A | 02-02-1993 |
| | | | US | 5189126 A | 23-02-1993 |
| | | | US | 5264532 A | 23-11-1993 |
| | | | US | 5278227 A | 11-01-1994 |