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- (71) Applicant (for all designated States except US): **UNITED STATES MINERAL PRODUCTS COMPANY d/b/a ISOLATEK INTERNATIONAL** [US/US]; 41 Furnace Street, Stanhope, NJ 07874 (US).
- (72) Inventor: **NUZZO, Charles, A.**; 626 Rt. 94, Newton, NJ 07860 (US).
- (74) Agent: **CASIERI, Christopher, S.**; Mathews, Shepherd, McKay & Bruneau, P.A., 29 Thanet Road, Suite 201, Princeton, NJ 08540 (US).
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(54) Title: INTUMESCENT COATINGS

(57) Abstract: A method of providing a thermal barrier between a fire and a combustible substrate, such as polyurethane foam, is provided. The method comprises the step of applying at least one coat of thin-film intumescent coating to the surface of the combustible substrate. The coating may be applied to the surface of the foam by any conventional means such as rolling or brushing, but is preferably spray applied with an airless sprayer. The thin-film intumescent coating may be solvent based but is preferably water based and preferably comprises polyvinyl acetate resins and inorganic fillers. The coating is typically applied range from 1-500 mils thick. The polyurethane foam is preferably spray-applied polyurethane foam with a density in the range of 0.5-3.2 lbs.

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **B05D 7/00** (2006.01)

 USPC: 427/372.2,384,407.1,421.1
 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)
 U.S. : 427/372.2, 384, 407.1, 421.1

 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 practicable, search terms used)


C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,810,850 A (ROWTON) 14 May 1974 (14.05.1974), column 1, lines 25-37,, column 5, lines 69-72, column 6, lines 5-12.	1-21

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"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
"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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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"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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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Tim Meeks  Telephone No. (571) 272-1423
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