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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B32B 27/14, C09D 5/16		A1	(11) International Publication Number: WO 96/24489
			(43) International Publication Date: 15 August 1996 (15.08.96)
(21) International Application Number: PCT/US95/06378		(81) Designated States: CA, CN, JP, KR, MX, RU, SG, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 19 May 1995 (19.05.95)			
(30) Priority Data: 08/386,925 / 10 February 1995 (10.02.95) US		Published With international search report.	
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(54) Title: FIRE RATED FLOOR DOOR AND CONTROL SYSTEM

(57) Abstract

Horizontally hinged covers (47) for use in ceiling/floors are provided which are highly fire resistant and which in the event of fire automatically close. The door (47) preferably utilizes a multi-layer construction comprising an intumescent lower (inner) layer (48), an intermediate structural layer and a top (outer) layer of a cementitious material. The horizontally hinged door (47) utilizes an automatic closing system in the event of fire comprising a fusible link (21) which activates a pressurized gas source (44) to close the door (47) and which pressurized gas source (44) is automatically purged when the door (47) is closed to prevent explosion of the pressurized gas source (44). The fusible link (21) also actuates (opens) a hydraulic valve (40) to allow the flow of hydraulic fluid from a pneumatic/hydraulic housing (11) which is used with a movable rod (12) to open and close the door (47).

