

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number:

0 344 964
A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 89305257.1

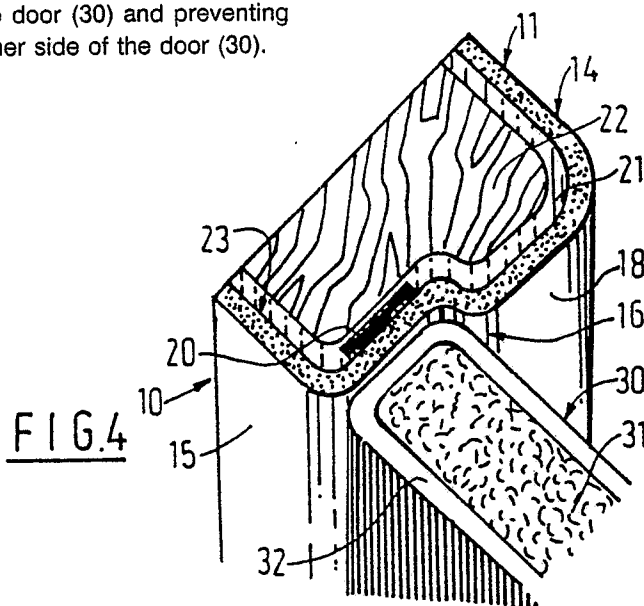
(51) Int. Cl.⁵: E06B 5/16 , A62C 3/14

(22) Date of filing: 24.05.89

(30) Priority: 30.05.88 IE 1632/88

(43) Date of publication of application:
06.12.89 Bulletin 89/49(84) Designated Contracting States:
AT BE CH DE ES FR GB GR IT LI LU NL SE(88) Date of deferred publication of the search report:
25.04.90 Bulletin 90/17(71) Applicant: **WEN-PLAST RESEARCH & DEVELOPMENT LIMITED**
North Quay
Wicklow(IE)(72) Inventor: **O'Mara, Alphonsus**
Hunter's Moon
Kilquade County Wicklow(IE)(74) Representative: **Barlow, Roy James et al**
J.A. KEMP & CO. 14, South Square, Gray's
Inn
London WC1R 5EU(GB)(54) **Improvements in or relating to a door.**

(57) An element (10) for use as a door frame or part thereof comprises an intumescent strip (20) enclosed in a cured plastics material (11). The element (10) also comprises an element (22) of solid construction. In use, when the intumescent strip (20) is actuated to a temperature between 120°C and 300°C due to heat from a fire, it expands to a volume of at least six times its non-turgid state thereby sealing the element (10) to the fire door (30) and preventing the spread of fire to the other side of the door (30).



EP 0 344 964 A3

EP 89 30 5257

Page 1

DOCUMENTS CONSIDERED TO BE RELEVANT			Page 1
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	DE-U-8605370 (WALTER TECKENTRUP) * page 6, last paragraph - page 7, line 34; figures *	1, 14	E06B5/16 A62C3/14
A	----	2, 5, 12, 13	
X	GB-A-2092214 (THEO SCHROEDERS) * page 1, line 75 - page 2, line 31; figures * * page 2, lines 46 - 64 *	1, 6, 14	
A	----	12, 13	
X	GB-A-2070114 (TYNETOWER LTD.) * page 1, line 95 - page 2, line 26; figures *	1, 14	
A	----	2, 3, 12, 13	
X	FR-A-2243319 (MARANTIER) * pages 4 - 5; figures *	1, 14	
A	----	2, 3, 6, 12, 13	
A	GB-A-2050390 (GENERAL TIRE & RUBBER CO.) * page 1, lines 25 - 40 * * page 4, lines 4 - 11 *	4, 7	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	EP-A-19947 (STAMICARBON) * page 2, lines 4 - 31 *	4, 7, 8	A62C E06B B32B
A	EP-A-228952 (STRATINOR) * column 1, line 61 - column 3, line 22 *	4, 7, 8	
A	FR-A-2313191 (S.A. USINES CHAUSSON) * page 2, lines 5 - 17 * * page 2, line 28 - page 4, line 21 *	4, 7, 8	
A	US-A-4126719 (TAKUJI KOYANAGI) * column 2, line 37 - column 3, line 58 *	4, 7, 8, 9	
		-/--	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27 FEBRUARY 1990	Examiner KAPOULAS T.
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			



EP 89 30 5257
Page 2

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	US-A-3881978 (LIVINGSTON) * column 1, lines 33 - 52 * * columns 2 - 4 * -----	4, 7, 8, 9	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27 FEBRUARY 1990	Examiner KAPOULAS T.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			