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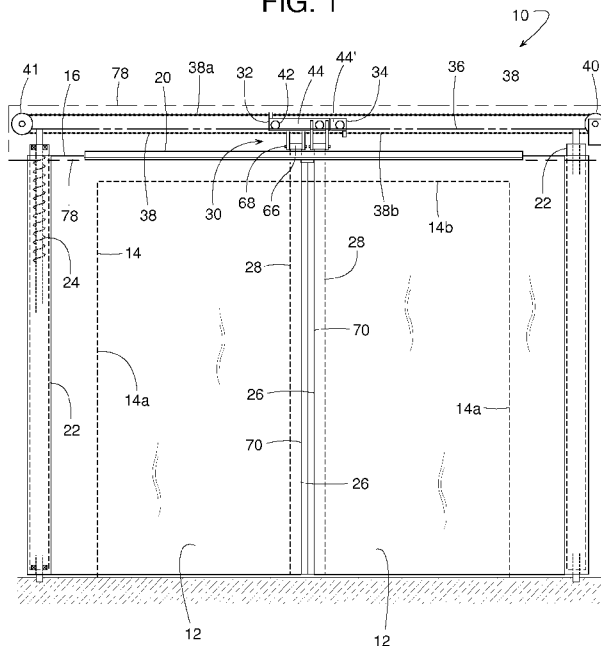
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(54) Title: UPPER SEAL FOR A HORIZONTAL SIDE-MOVING DOOR

FIG. 1



(57) Abstract: An example of a horizontal side -moving door (10) with a side -winding or horizontally translating curtain (12) includes an upper seal (20) comprising an upper edge (16) of the curtain (12) sliding within a groove (18) of a seal guide (20). To protect the door (10) in the event of an impact, at least a portion of the curtain's upper edge (16) can restorably pull out from within the groove. To avoid damage in certain situations, the seal guide (20) might resiliently deflect as well. After an impact, the curtain's upper edge (16) is automatically fed back into the groove (18) by simply opening and closing the door (10). During normal operation, the curtain's upper edge (16) advantageously deflects in response to air pressure against either side of the door (10). In some examples, the seal guide (20) is of a uniform cross - section, which makes the seal guide (20) easy to manufacture by way of a conventional plastic extrusion process.



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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 096 902 A (JUNOD LOUIS) 27 June 1978 (1978-06-27) cited in the application the whole document -----	1-18
A	US 5 381 846 A (LICHY DALE M [US]) 17 January 1995 (1995-01-17) figures 1,3,4 -----	1-18
A	US 6 082 432 A (KISSINGER DAREN [US]) 4 July 2000 (2000-07-04) figures 5,7 -----	1,14-16
A	US 6 003 583 A (LACOSTE KEVIN [US] ET AL) 21 December 1999 (1999-12-21) figures 1,3 column 4, line 14 - line 24 -----	1

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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 4096902	A	27-06-1978	BE 832037 A1 01-12-1975
			CA 1043692 A1 05-12-1978
			CH 595541 A5 15-02-1978
			DE 2625927 A1 23-12-1976
			DK 262476 A 14-12-1976
			FR 2314337 A1 07-01-1977
			IT 1061747 B 30-04-1983
			NL 7606298 A 15-12-1976
			SE 7606503 A 14-12-1976

US 5381846	A	17-01-1995	NONE

US 6082432	A	04-07-2000	NONE

US 6003583	A	21-12-1999	NONE
