

## Title (en)

Door with liftable, reinforced by horizontal bars.

## Title (de)

Tür mit aufrollbarem, mit horizontalen Stäben versteiftem Vorhang.

## Title (fr)

Porte à rideau relevable renforcée par des barres d'armature horizontales.

## Publication

**EP 0398791 A1 19901122 (FR)**

## Application

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## Abstract (en)

Goods-handling door with liftable curtain (4) comprising a frame formed from two vertical lateral uprights (1, 2) connected at their tops by a cross-piece (3), the said lateral uprights each constituting or comprising a slide, each slide having a guidance wall on each side of the plane of the curtain, the latter being able to be gathered up at the top by rolling or folding, the curtain being reinforced by horizontal bars (5) whose ends slide in the said slides, characterised in that at least one of the bars (5) has, at least over part of its length, sufficient flexibility to allow it to come out of at least one slide when an abnormal lateral force is applied to the bar without undergoing permanent distortion which can subsequently interfere with the operation of the curtain. <IMAGE>

A rolling or folding doorway shutter, for use e.g. in an industrial or commercial building, consists of vertical supports (1,2) on either side of the doorway, connected by a cross member (3) at the top. Each support contains a slider guide for the door shutter (4) which is roller or folded at the top. The shutter is reinforced by a number of horizontal bars (5) which have their ends moving in the sliders. At least one of the bars has a flexible section (e.g. spring-loaded and telescopic) which enables it to jump out of the slider in the event of an abnormal transverse effort being applied to it, without creating any permanent deformation in the bar which might ultimately affect the operation of the shutter. The bar's flexibility can be provided in the centre or at one or both ends, and the slider containing the flexible bar can have a branched track to allow for the replacement of the bar once it has been deformed.

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## CPC (source: EP)

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## Citation (search report)

- [Y] EP 0264220 A1 19880420 - CLARK DOOR LTD [GB]
- [Y] GB 1597396 A 19810909 - UTEC AB
- [Y] EP 0272733 A1 19880629 - COENRAETS BENOIT JAUQUES
- [A] EP 0033199 A1 19810805 - PALMER GLENN ROBERT
- [XP] EP 0320350 A1 19890614 - NERGECO SA [FR]

## Cited by

FR2973432A1; ITTV20090097A1; BE1014506A3; FR2762354A1; FR2674566A1; FR2728011A1; BE1004897A3; FR2762642A1; CZ298010B6; US7036549B2; WO03048498A1; WO9220895A1; US9556672B2; WO2012131207A1; WO2016131476A1; WO9848139A1; US6192960B1; US6481487B2

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