

Title (en)
Sensing safety edge systems

Title (de)
Sicherheitsfühlleistungssystem

Title (fr)
Système de bordure détectrice de sécurité

Publication
EP 0803629 A3 19980318 (EN)

Application
EP 97106858 A 19970425

Priority

- US 63752396 A 19960425
- US 75476996 A 19961120

Abstract (en)
[origin: EP0803629A2] Each sensing safety edge system includes an elongated, one-piece, flexibly resilient, extrusion (28) of air-impervious material. The extrusion includes an elongated hollow member (30) with tubular wall (32), a pair of laterally spaced apart support legs (36,38) extending radially outwardly from an outer side of the tubular wall, an elongated mounting strip (42) extending outwardly from the tubular wall between the pair of support legs and a weather strip (45) extending outwardly from an opposing side of the tubular member. Conical plug closures (44,46) are provided in each of two opposing ends of the tubular member, preferably so as to seal the ends to air passage. The resulting safety edge is mounted on a leading edge (18) of an overhead steel door (16) or like movable structure. In different embodiments, a pneumatic switch (60), which may be an air wave responsive switch with diaphragm and adjustable bleed valve, is located outside the tubular member and is coupled with the hollow interior of the tubular member by a separate tube (56), which may be passed through one of the closures or transversely through the tubular wall of the extrusion. Alternatively, the tubular member may receive a pair of spaced apart opposing electrical contacts (212,214) to provide an electric switch within the tubular member or may be provided with a light source (112) and light sensor (114) at its opposing ends to configure the safety edge for optical control.

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E05Y 2800/26 (2013.01); **E05Y 2900/106** (2013.01)

Citation (search report)

- [X] US 4896714 A 19900130 - ELLIS ARTHUR S [CA]
- [X] FR 2663363 A1 19911220 - ROUSSEL GERARD
- [XY] DE 9418117 U1 19950202 - HUBER+SUHNER AG [CH]
- [X] EP 0649967 A1 19950426 - MEWALD GMBH [AT]
- [YA] US 2952751 A 19600913 - COOKSON JR HAROLD W, et al

Cited by
EP1496184A3; EP1231348A3

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