Title (en)

PROTECTION DEVICE AGAINST BURGLARY FOR LIGHT SHAFTS OR SUCH-LIKE

Publication

EP 0024312 B1 19830216 (DE)

Application

EP 80104382 A 19800725

Priority

DE 2932205 A 19790808

Abstract (en)

[origin: US4395861A] A security grid for an opening is provided which includes at least two support members fixed on opposite side walls of the opening. Each support member is a hollow rectangular solid. A plurality of tube members extend between and are received in the support members with each of the tube members comprising a hollow tube and a core member inserted in the hollow tube. The core has a length which is greater than the distance between opposite inner walls of the support members. Each of the support members includes holes in the side walls thereof for receiving the tube members therein. Screw-plugs are provided for fixing the support members to the side walls of the opening and the support members include stoppers for closing the ends of the hollow rectangular solid. Further, the hollow rectangular solid includes at least one opening in the top thereof and concrete is poured into the interior of the hollow rectangular solid through the hole, and a reinforcing rod may be set in the concrete. In an alternative embodiment, the hole in the support member extends to the bottom of the side of the support member and extends over at least a portion of the bottom thereof. The support member further includes a slide supported in the support member and slidable in the longitudinal direction thereof. The slide includes openings which are in alignment with the hole to permit the insertion of the tube member into the hole. The slide is slidable to misalign the openings with the hole to prevent the removal of the tube member from the hole.

IPC 1-7

E04F 17/06; E06B 9/01

IPC 8 full level

E04F 17/06 (2006.01); E04F 19/10 (2006.01); E05G 1/024 (2006.01); E06B 9/01 (2006.01)

CPC (source: EP US)

E04F 17/06 (2013.01 - EP US); E04F 19/10 (2013.01 - EP US); E05G 1/024 (2013.01 - EP US); E06B 9/01 (2013.01 - EP US); E06B 2009/015 (2013.01 - EP US)

Cited by

GB2142369A; GB2240128A; GB2231608A; EP0078566A1; FR2585758A1; EP0158848A3

Designated contracting state (EPC)

AT BE CH FR GB IT LI LU NL SE

DOCDB simple family (publication)

US 4395861 A 19830802; AR 223387 A1 19810814; AT E2560 T1 19830315; BR 8004968 A 19810217; CA 1146419 A 19830517; DE 2932205 B1 19801211; DE 2932205 C2 19810827; DK 337980 A 19810209; EP 0024312 A1 19810304; EP 0024312 B1 19830216; ES 493830 A0 19810401; ES 8104472 A1 19810401; FI 802391 A 19810209; JP S5634847 A 19810407; NO 802238 L 19810209; PT 71648 A 19800901; PT 71648 B 19810701; ZA 804790 B 19810826

DOCDB simple family (application)

US 17558980 A 19800805; AR 28197680 A 19800729; AT 80104382 T 19800725; BR 8004968 A 19800807; CA 356691 A 19800722; DE 2932205 A 19790808; DK 337980 A 19800806; EP 80104382 A 19800725; ES 493830 A 19800730; FI 802391 A 19800730; JP 10784680 A 19800807; NO 802238 A 19800724; PT 7164880 A 19800805; ZA 804790 A 19800806