

Title (en)

Safety drive unit in combination with a movable of protection screen, particularly in manufacturing machines

Title (de)

Sicherheits-Antriebseinheit in Kombination mit einem Schutzschirm, insbesondere für Herstellungsmaschinen

Title (fr)

Unité d'entraînement à sécurité en combinaison avec un écran de protection, notamment pour des machines de fabrication

Publication

EP 0994032 A1 20000419 (EN)

Application

EP 99120332 A 19991012

Priority

IT SV980059 A 19981014

Abstract (en)

Safety drive unit, in particular for the movement of protection screens in manufacturing machines the said unit comprising at least one drive motor (25, 26) that drives a support of the motion (7) of an element of cover and/or protection (5, 205). According to the invention, the transmission between the drive motor (25, 26) and the protection screen (5, 205) is formed by a pair of helical gears (22, 23) engaged between each other with the corresponding external helical threads (122, 122', 123, 123'), the said helical gears (22, 23) being made in such a manner, that the rotation of the helical drive gear (23) in the two directions engages the rotation in the two directions of the other helical driven gear (22), whereas a rotation of the driven helical gear (22) engages a locking underpinning of the same in or with the helical drive gear (23) which prevents the rotation. The invention relates also to a protection screen equipped with such a drive unit. <IMAGE>

IPC 1-7

B65B 57/00

IPC 8 full level

B65B 57/00 (2006.01)

CPC (source: EP)

B65B 57/005 (2013.01)

Citation (applicant)

- IT SV980033 A 19980522
- EP 0816714 A1 19980107 - SASIB SPA [IT]

Citation (search report)

- [A] US 5617987 A 19970408 - HOWARD JAMES E [US], et al
- [A] EP 0275418 A1 19880727 - GFA ANTRIEBSTECHNIK GMBH [DE]
- [A] US 3813958 A 19740604 - MEYER H

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0994032 A1 20000419; EP 0994032 B1 20040331; DE 69915964 D1 20040506; DE 69915964 T2 20041028; IT 1305420 B1 20010504; IT SV980059 A0 19981014; IT SV980059 A1 20000414

DOCDB simple family (application)

EP 99120332 A 19991012; DE 69915964 T 19991012; IT SV980059 A 19981014