

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
21 July 2005 (21.07.2005)

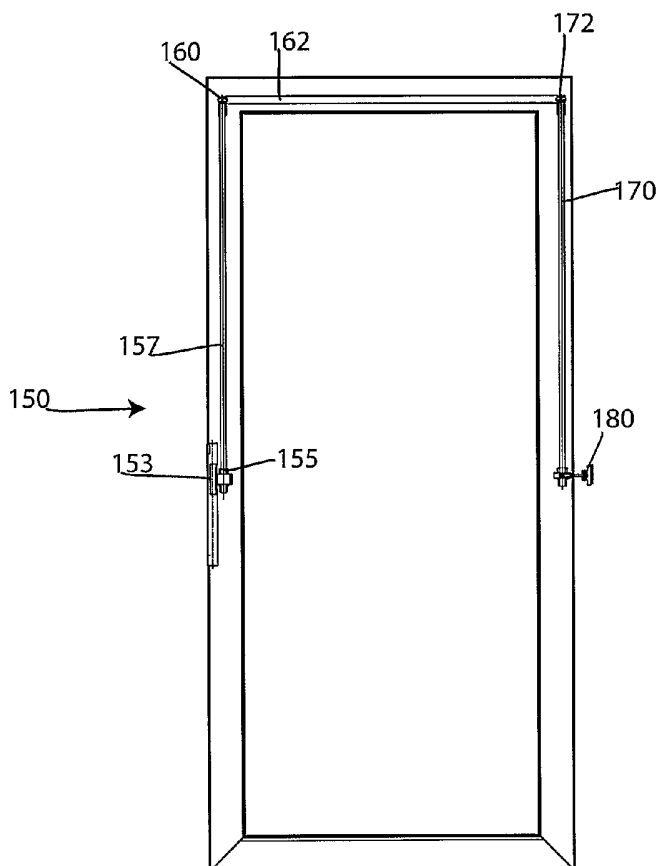
PCT

(10) International Publication Number  
**WO 2005/065302 A3**

- (51) International Patent Classification<sup>7</sup>: **E05F 11/00**
- (21) International Application Number:  
PCT/US2004/043617
- (22) International Filing Date:  
29 December 2004 (29.12.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
10/750,577 29 December 2003 (29.12.2003) US
- (71) Applicant and  
(72) Inventor: ZIMMERMANN, Eric [US/US]; 25-74-31st  
Street, Astoria, US 11102 (US).
- (74) Agents: COLLARD, William et al.; 1077 Northern Blvd,  
Roslyn, NY 11576 (US).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: PORTAL COVERING DEVICE HAVING A HANDLE DRIVE MECHANISM



(57) Abstract: A portal covering such as door or window having a handle that rotates as the door or window rotates. Essentially this portal covering includes a handle, that is rotatably mounted onto the portal covering and that drives the door around an axis associated with a frame or wall. As the handle is rotated on its axis on the cover, the cover rotates on its axis on the frame. The rotation is accomplished through a gearing system which in this case could be in the form of a miter gear, an offset gear in a pushrod system or other bevel gears or a direct drive linking two shafts together. Other embodiments or drive mechanisms are also possible such as a push plate, cables and pulleys, gear boxes, or any other type of drive system that incorporates the rotational movement of a handle which translates into the rotational movement of a door.

WO 2005/065302 A3



**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(88) Date of publication of the international search report:**

22 December 2005

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US04/43617

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC(7) : E05F 11/00  
 US CL : 049/324  
 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**  
 Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 049/324, 278, 276, 325; 016/412, 439, 438

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

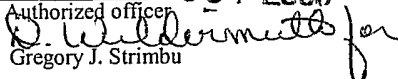
**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,085,297 A (Linderfelt) 16 April 1963 (16.04.1963), whole document.	1, 2 and 4
X	US 3,385,655 A (Huston et al.) 28 May 1968 (28.05.1968), whole document.	2, 4 and 7
---		-----
Y		3
Y	US 1,833,121 A (Norton) 24 November 1931 (24.11.1931), whole document.	3
Y	US 2,320,096 A (Persson) 25 May 1943 (25.05.1943), whole document.	5 and 6
Y	US 761,290 A (Fagan) 31 May 1904 (31.05.1904), whole document.	5 and 6

Further documents are listed in the continuation of Box C.       See patent family annex.

<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>
---	---

Date of the actual completion of the international search 15 September 2005 (15.09.2005)	Date of mailing of the international search report <b>28 OCT 2005</b>
---	--

Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer  Gregory J. Strimbu Telephone No. 571-272-6836
---	--