(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 11 April 2002 (11.04.2002)

PCT

(10) International Publication Number WO 02/28762 A3

(51) International Patent Classification7: B60P 3/12

B66F 9/10,

(21) International Application Number: PCT/IL01/00888

(22) International Filing Date:

24 September 2001 (24.09.2001)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

138879

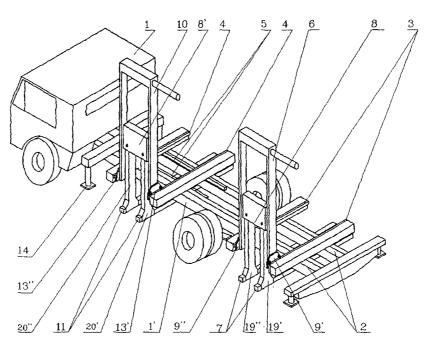
5 October 2000 (05.10.2000) II

- (71) Applicant (for all designated States except US): OFAKIM NERHAVIM CONSTRUCTION AND INVEST-MENTS 1990 LTD. [IL/IL]: Bar-Kochva Street 63, 49102 Petach-Tikva (IL).
- (71) Applicant and
- (72) Inventor: RAZ, Zvi [IL/IL]; Martin Buver Street 12, 49407 Petach-Tikva (IL).

- (74) Agent: DR. YIZHAK HESS & PARTNERS; P.O. BOX 6451, 61063 Tel-Aviv (IL).
- (81) Designated States (national): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EC, EE, EE (utility model), ES, FI, FI (utility model), 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, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: TWO SIDED SYSTEM FOR LOADING TRUCKS



(57) Abstract: The present invention relates to a lifting device mountable on a vehicle (1) comprising: a. a chassis (2) which is connected to the vehicle; said chassis having at least one set of two rails (3, 4) crossing same perpendicularly to the moving direction; said rails being connected by suitable means to opposite sides of the chassis; and b. at least one lifting system (6, 10) being mounted on the rails of the chassis and movable between them; the lifting system extend-ing vertically to the rails and being provided with carrying means (7, 11) extending perpendicularly to them; all parts being connected to each other by suitable connecting means and actuated by suitable actuating means.



C C 28767 C

WO 02/28762 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:

6 June 2002

INTERNATIONAL SEARCH REPORT

International Application No Pt. 1/TL 01/00888

Pu/IL 01/00888 A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B66F9/10 B60F B60P3/12 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) IPC 7 B66F B60P 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 practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category 9 1-3, EP 0 775 666 A (OFAKIM NERHAVIM χ 5-11,15, CONSTRUCTION AND INVESTMENTS) 16,19 28 May 1997 (1997-05-28) column 5, line 30 -column 9, line 13 & IL 116 110 A 9 May 1999 (1999-05-09) cited in the application 1 - 3FR 2 592 644 A (PELCZ) X 10 July 1987 (1987-07-10) the whole document FR 2 278 530 A (ETS JEAN MARIE WAMBERGUE) Α 13 February 1976 (1976-02-13) FR 2 517 268 A (WOLFF) Α 3 June 1983 (1983-06-03) -/--Patent family members are listed in annex. Further documents are listed in the continuation of box C Χ *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 Special categories of cited documents "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another *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 docucitation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled other means in the art. *P* document published prior to the international filing date but later than the priority date claimed *&* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 26/03/2002 15 March 2002 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340–2040, Tx. 31 651 epo nl, Van den Berghe, E

Fax: (+31-70) 340-3016

INTERNATIONAL SEARCH REPORT

International Application No
PUI/IL 01/00888

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	(5)
Category °	Citation of document, with indication where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2 325 536 A (MERLE) 22 April 1977 (1977-04-22)	
А	FR 2 503 644 A (ALBERT IRION NACHF.) 15 October 1982 (1982-10-15)	
Α	CH 358 380 A (ALBERT IRION NACHFOLGER) 15 November 1961 (1961-11-15)	

1

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No
PCI/IL 01/00888

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 775666	A	28-05-1997	IL CA EP US	116100 A 2190810 A1 0775666 A1 5915912 A	14-11-1996 23-05-1997 28-05-1997 29-06-1999
FR 2592644	Α	10-07-1987	FR	2592644 A1	10-07-1987
FR 2278530	Α	13-02-1976	FR	2278530 A1	13-02-1976
FR 2517268	Α	03-06-1983	FR	2517268 A1	03-06-1983
FR 2325536	Α	22-04-1977	FR	2325536 A1	22-04-1977
FR 2503644	Α	15-10-1982	DE FR	3114500 A1 2503644 A1	04-11-1982 15-10-1982
CH 358380	Α	15-11-1961	NONE		