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(54) **A telescopic arm for a lift truck**

(57) A telescopic arm for a lift truck, of a type having at least one external arm (2) and at least one extending arm (3) which extending arm (3) is slidably inserted along a longitudinal axis (x) thereof internally of the external arm (2). The external arm (2) and the extending arm (3) have box sections, in which a lower part (4) exhibits at least two tracts (5), symmetrically arranged with respect to a vertical plane of symmetry (π), which delimit a concavity facing inwardly of the section and which at least two tracts (5) are inclined by a determined angle of inclination (α) with respect to the plane of symmetry (π).

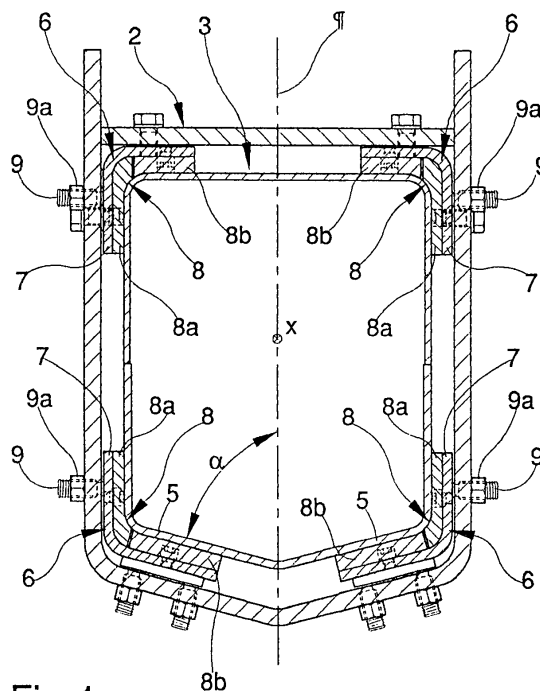


Fig. 1



European Patent
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EUROPEAN SEARCH REPORT

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EP 04 07 8059

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	FR 2 790 538 A (PPM) 8 September 2000 (2000-09-08)	1-4	INV. B66C23/70
A	* figures *	5-7	
X	US 4 459 786 A (PITMAN ET AL) 17 July 1984 (1984-07-17)	1-3	
A	* figures 5,14-17 *	5	
X	US 6 062 404 A (ERDMANN ET AL) 16 May 2000 (2000-05-16)	1-4	
A		5	
X	US 6 499 612 B1 (HARRINGTON DANIEL L ET AL) 31 December 2002 (2002-12-31)	1-4	
A	* figures 1,2a,2b *	5	
X	EP 1 302 435 A (EFFER S.P.A) 16 April 2003 (2003-04-16)	1-4	
A			
A	US 4 004 695 A (HOCKENSMITH ET AL) 25 January 1977 (1977-01-25)	1,5-8	TECHNICAL FIELDS SEARCHED (IPC)
	* figures 1,4-6 *		B66C
A	WO 94/29212 A (EC ENGINEERING + CONSULTING SPEZIALMASCHINEN GMBH; KASPAR, ERNST) 22 December 1994 (1994-12-22)	5	
	* figures 2,3,5 *		
A	EP 1 319 760 A (KOMATSU LTD; KABUSHIKI KAISHA MURATO TEKKOSHO) 18 June 2003 (2003-06-18)	5-7	
	* figures 2,3 *		
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 19 May 2006	Examiner Masset, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 07 8059

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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19-05-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2790538	A	08-09-2000	NONE	
US 4459786	A	17-07-1984	NONE	
US 6062404	A	16-05-2000	DE 19653502 A1 EP 0849212 A1 JP 10218564 A	25-06-1998 24-06-1998 18-08-1998
US 6499612	B1	31-12-2002	NONE	
EP 1302435	A	16-04-2003	NONE	
US 4004695	A	25-01-1977	AU 501359 B2 AU 1304876 A BE 840758 A2 CA 1039239 A1 DE 2616859 A1 FR 2307756 A1 GB 1530385 A IT 1059156 B JP 1193288 C JP 51129061 A JP 58010355 B NL 7604065 A SE 409691 B SE 7604478 A	21-06-1979 20-10-1977 02-08-1976 26-09-1978 28-10-1976 12-11-1976 25-10-1978 31-05-1982 29-02-1984 10-11-1976 25-02-1983 19-10-1976 03-09-1979 17-10-1976
WO 9429212	A	22-12-1994	CN 1127497 A DE 9308993 U1 EP 0702661 A1 JP 2828779 B2 JP 9501384 T	24-07-1996 12-08-1993 27-03-1996 25-11-1998 10-02-1997
EP 1319760	A	18-06-2003	CA 2419723 A1 WO 0220907 A1 JP 2002070056 A US 2004131459 A1	19-02-2003 14-03-2002 08-03-2002 08-07-2004

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82