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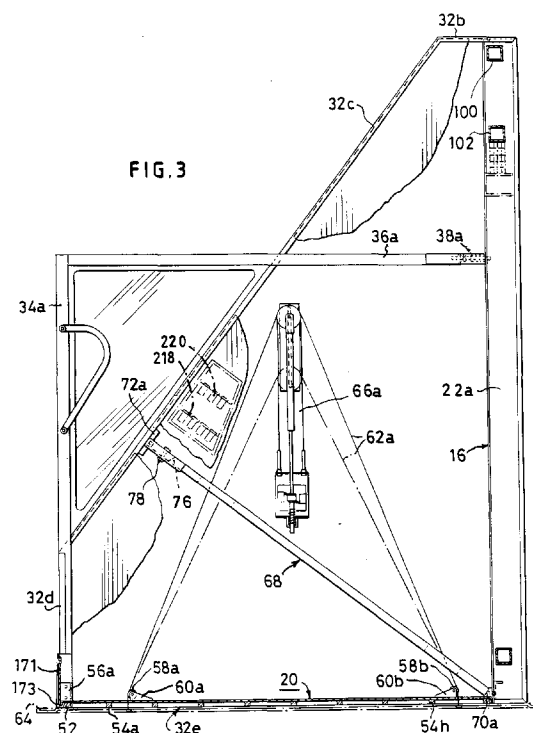
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(54) **Improvements in or relating to domestic through-floor, vertical lifts for use by persons with limited mobility**

(57) A domestic, through-floor, vertical lift (10) is adapted for use by persons with limited mobility, the lift (10) being of a type serving only two floors and comprising a car (12) adapted and arranged to ascend and descend vertically between the two floors. The car (12) is lightweight and comprises a chassis (16) engaging rails (14) at the back of the car (12) only. Side panels (18) and a floor panel (20) are assembled to each other and to the chassis (16) by interlocking flanges and are held together by pre-loaded struts (36, 38, 68) in end-to-end compression.

To brake the car (12) from runaway descent, a cord (138) extends up from the car (12) to a low speed governor (144) with a winder (142) which stops unwinding the cord (138) when the descent speed is too fast. The resultant pull on the cord 138 causes it to pull two toothed brake segments (114) into the "on" position, so that their teeth (120) bite into the guide rails (14) to stop the car.

With a mains supply failure to the primary motor 184, a battery-driven secondary motor (192) is arranged to be connected by a clutch (202) to take over from the primary motor (184) and the primary motor brake (210) is released.



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EUROPEAN SEARCH REPORT

Application Number

EP 96 30 2917

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 5 207 295 A (BIALY LOUIS ET AL) 4 May 1993 * column 4, line 35 - column 5, line 15; figures 5,6 *	1	B66B11/02 B66B5/16 B66B11/04
A	FR 1 451 791 A (LÖDIGE) * page 2, column 2, paragraph 2 - page 3, column 2, paragraph 2; figures 1,2 *	1	
A	US 4 700 809 A (LAZAR GUSTAV) 20 October 1987 * abstract *	1	
A	DE 91 04 827 U (GEORGIEW) 25 July 1991 * the whole document *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B66B
The present search report has been drawn up for all claims.			
Place of search THE HAGUE		Date of completion of the search 17 June 1996	Examiner SOZZI, R
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

EPO FORM 1503 01/82 (P04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet -B-

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respects of which search fees have been paid, namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.

namely claims: 1-10



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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 1-10:

A domestic vertical lift comprising: guide rails, a chassis, side and floor panels and preloaded struts for tensioning the panels

2. Claims 11-21:

A domestic vertical lift comprising: speed sensing means and braking means

3. Claims 22-23:

Electric motor drive system