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(54) **Absolute position reference system**

(57) A position reference system for use with a conveyance, such as an elevator (12). The system includes a code affixed to or embedded within a suspension device or primary motion coupling such as a rope or coated steel belt (16). A reader (28) in a fixed location determines the position of the conveyance.

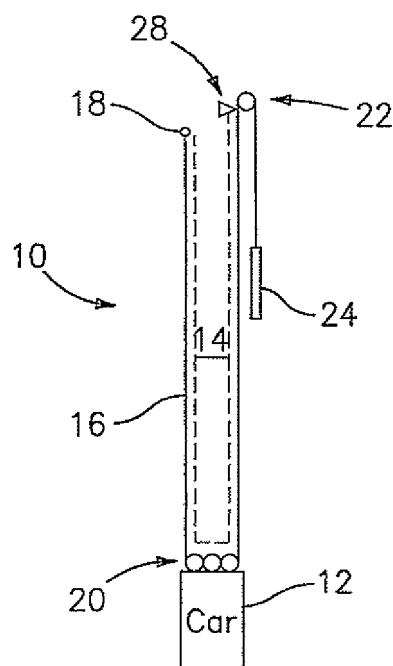


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 11 15 9848

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	WO 01/83352 A (INVENTIO AG [CH]; WEGENER DIETRICH [CH]; ACH ERNST [CH]) 8 November 2001 (2001-11-08)	1-3,11, 12	INV. H02P5/00 B66B1/34 B66B7/06
Y	* abstract *	13	
A	* page 7, line 9 - page 11, line 8 * * figures 1-3 *	4-10	

X	US 4 218 671 A (LEWIS DAVID C [GB]) 19 August 1980 (1980-08-19)	1-3,11, 12	
A	* abstract * * column 3, line 20 - column 5, line 43 * * figures 1-8 *	4-10	

X	EP 1 181 963 A1 (BADER HEINRICH [DE]) 27 February 2002 (2002-02-27)	1-3,11, 12	
A	* abstract * * paragraph [0024] - paragraph [0038] * * figures 1-3 *	4-10	

Y	US 5 747 755 A (COSTE STEVEN D [US] ET AL) 5 May 1998 (1998-05-05)	13	TECHNICAL FIELDS SEARCHED (IPC)
	* the whole document *		

Y	US 4 085 823 A (CAPUTO WILLIAM R ET AL) 25 April 1978 (1978-04-25)	13	B66B
	* abstract * * column 11, line 20 - line 31 * * figures 1, 6 *		

The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 2 August 2011	Examiner Oosterom, Marcel
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 (F04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements 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.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ 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 respect of which search fees have been paid, namely claims:

☐ None 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 invention first mentioned in the claims, namely claims:

☐ The present supplementary 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 (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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

1. claims: 1-12

Coded belt-type suspension means for a position reference system for use with a conveyance.

2. claims: 12, 13

Use of position reference system to measure stretch or slip of suspension means.

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

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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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

02-08-2011

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