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(54) **Elevator rail profile estimation and elevator control method.**

(57) An elevator hoistway rail profile is made during an elevator car learning run by summing (32) a doubly integrated (36) car horizontal acceleration signal with a relative rail-car displacement signal (Xb) and storing the summed signal (XR) according to the vertical position (Y) of the car in the hoistway. Elevator car horizontal vibrations are actively controlled by retrieving data stored in memory indicative of the out-of-straightness of the guide rails.

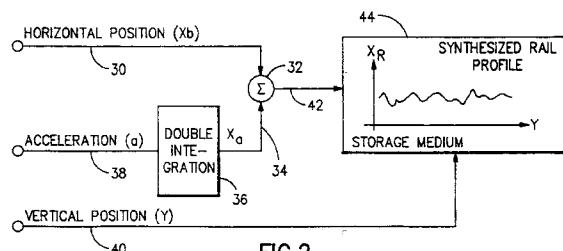


FIG.2



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number

EP 92 30 2211

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl.5)						
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim							
X	GB-A-2 181 275 (ELEVATOR GMBH) * page 1, line 70 - line 121 * * page 2, line 16 - line 58; figures 2,3 *	1,8	B66B1/44 B66B7/02 B66B11/02						
A		2-4,6,7, 10,11							
D	& US-A-4 750 590 (MATTI OTALA) ---								
A	DATABASE WPIL Week 9030, Derwent Publications Ltd., London, GB; AN 90-224718								
	& FI-A-8 804 380 (KONE ELEVATOR GMBH) * the whole document *								
A	US-A-4 754 849 (ANDO) -----								
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)						
			B66B						
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 34%;">Examiner</td> </tr> <tr> <td>THE HAGUE</td> <td>15 OCTOBER 1992</td> <td>SAAW L.J.</td> </tr> </table>				Place of search	Date of completion of the search	Examiner	THE HAGUE	15 OCTOBER 1992	SAAW L.J.
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THE HAGUE	15 OCTOBER 1992	SAAW L.J.							
<b>CATEGORY OF CITED DOCUMENTS</b> 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							