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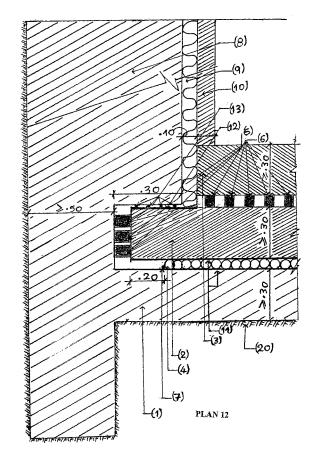
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## (54) Aseismic foundation

The aseismic foundation consists of three plates (57)(1,2,3) of reinforced concrete. Plate (1) touches the ground (20). Between plate (1) and plate (2) there are rigid metal spheres (4), and between plate (2) and plate (3), there are vertical compression-tension springs (6). Plate (2) is connected with horizontal compression-tension springs (5), to a reinforced concrete anchor wall (3), which is fixed to the ground (20) and solid-webbed attached to plate (1). Thus, the anchor wall (8) and plate (1) follow exactly the movement of the ground (20). The horizontal metal springs (5) are positioned symetrical and perimetrical on plate (1), having the same total elastic constant for both its vertical directions. The total elastic constant of spring (5) is such, that the characteristic period of the horizontal movement of the system plate (2), plate (3), springs (5) superstructure (19), is equal with the characteristic period of the horizontal component of the ground vibration. The vertical compression-tension springs (6) have a total elastic constant, which allows for the characteristic period of the vertical movement of the system plate (3), vertical springs (6), superstructure (19), to be double than the characteristic period of the vertical movement of the ground (20).





## **EUROPEAN SEARCH REPORT**

Application Number EP 04 38 6019

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with ir of relevant passa	ndication, where appropriate, ges	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	PATENT ABSTRACTS OF vol. 1997, no. 07, 31 July 1997 (1997- -& JP 09 089044 A ( 31 March 1997 (1997 * abstract; figure	07-31) SAGARA TOSHIO), -03-31)	1	INV. E02D27/34 E04H9/02
Y	PATENT ABSTRACTS OF vol. 2002, no. 02, 2 April 2002 (2002- & JP 2001 280418 A 10 October 2001 (20 * abstract; figure	04-02) (FUJIKURA RUBBER LTD), 101-10-10)	1	
Α	PATENT ABSTRACTS OF vol. 009, no. 326 ( 21 December 1985 (1 & JP 60 159227 A (k 20 August 1985 (198 * abstract *	M-441), 985-12-21) AJIMA KENSETSU KK),	3	Troublett Fire Do
A	PATENT ABSTRACTS OF vol. 2000, no. 05, 14 September 2000 (-& JP 2000 055117 ASEIMITSU KOGYO KK), 22 February 2000 (2* abstract; figure	2000-09-14) (OHBAYASHI CORP; DAIDO		TECHNICAL FIELDS SEARCHED (IPC) E02D E04H E04B
	The present search report has I	peen drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
	The Hague	13 July 2006	Ler	roux, C
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot iment of the same category nological background written disclosure mediate document	L : document cited fo	ument, but publis the application rother reasons	shed on, or

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

EP 04 38 6019

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.

13-07-2006

Patent document cited in search report		Publication date		Patent family member(s)	Publicatio date
JP 09089044	Α	31-03-1997	NONE		
JP 2001280418	Α	10-10-2001	NONE		
JP 60159227	Α	20-08-1985	NONE		
JP 2000055117	Α	22-02-2000	NONE		

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m O}{=}$  For more details about this annex : see Official Journal of the European Patent Office, No. 12/82