



(11) Publication number:

0 376 452 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 89311549.3

(51) Int. Cl.⁵: **B61C** 9/52, B61F 5/22

(22) Date of filing: 08.11.89

Priority: 29.12.88 JP 330974/88 18.05.89 JP 122982/89

Date of publication of application: 04,07,90 Bulletin 90/27

Designated Contracting States:
DE ES FR GB IT SE

Bate of deferred publication of the search report: 13.03.91 Bulletin 91/11

Applicant: RAILWAY TECHNICAL RESEARCH INSTITUTE
2-8-38, Hikari-cho
Kokubunji-shi Tokyo(JP)

Applicant: SHIKOKU RAILWAY COMPANY 1-10 Hamano-Cho

Takamatsu-Shi Kagawa-Ken(JP)

Applicant: FUJI JUKOGYO KABUSHIKI KAISHA 7-2 Nishishinjuku 1-chome Shinjuku-ku Tokyo(JP)

⁷² Inventor: Wako, Kanji

30-27-104 Hongo 1-chome Bunkyo-ku

Tokyo(JP)

Inventor: Horike, Yuji 101 Gojo Kotohira-cho

Nakatado-gun Kagawa-ken(JP) Inventor: Matsuda, Kiyohiro

2-12, Fukue-cho 2-chome Sakaide-shi Kawaga-ken(JP)

Inventor: Sato, Tetsu

7-2, Nishishinjuku 1-chome Shinkjuku-ku Tokyo(JP)

Representative: Leale, Robin George et al FRANK B. DEHN & CO. Imperial House 15-19 Kingsway London WC2B 6UZ(GB)

(54) Railroad vehicle.

(b) A railroad vehicle in which power is transmitted by a right angle cardan system and the body (1) of which is inclined by a natural pendulum system. In a construction based on a right angle cardan system in which the axis of an output shaft (4S) extends in the longitudinal direction of the vehicle, two prime movers (4) are mounted on one vehicle body in the vicinity of the centre thereof so as to face in the opposite directions, or one prime mover (4) having a pair of output shafts (4S) disposed at its opposite ends is mounted on the vehicle body generally at the centre thereof, and power is transmitted from each output shaft (4S) to the corresponding one of axles (10)disposed at longitudinal ends of the vehicle through a propeller shaft (3). The pair of propeller shafts (3) are rotated in opposite directions by the corresponding output shafts (4S), thereby cancelling the reaction torques produced when the output shafts (4S) rotate with equal torques. There is therefore no possibility of the vehicle body being forcibly inclined. It is therefore possible to smoothly incline the vehicle body by the natural pendulum effect.

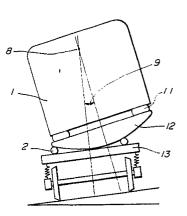


FIG.3



P: intermediate document
T: theory or principle underlying the invention

EUROPEAN SEARCH REPORT

EP 89 31 1549

DOCUMENTS CONSIDERED TO BE RELEVANT					
itegory	Citation of document with indication, where appropriate, of relevant passages		Relevant to claim		
Υ	FR-A-1 025 447 (HENSCH * Page 1, column 1, lines 6,		1	B 61 C 9/52 B 61 F 5/22	
A Y	FR-A-1 231 813 (ALSTHO)М)	3,4		
Α	FR-A-2 208 811 (O + K et al.) * Page 2, lines 1-4,22-28 *		1,2		
Α	US-A-2 391 103 (PIRON) * Claim 1; figures 1,2 *		1,2		
Α	EP-A-0 262 698 (ASCAN A/S) * Abstract; figure 1; column 5, lines 26-42 *		1,5-6		
Α	BE-A-3 804 97 (COMPAGNIE J.G. BRILL) * Figures 1-3 *		1		
				TECHNICAL FIELDS SEARCHED (Int. CI.5)	
				B 61 C B 61 F	
	The present search report has	been drawn up for all claims			
	Place of search Date of completi			Examiner	
	The Hague	06 December	er 90 SCHMAL R.		
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same catagory			E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons		
0:	technological background non-written disclosure intermediate document			same patent family, corresponding	