



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 1 018 480 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
28.02.2001 Bulletin 2001/09

(51) Int. Cl.⁷: **B66B 11/00**

(43) Date of publication A2:
12.07.2000 Bulletin 2000/28

(21) Application number: **00100130.4**

(22) Date of filing: **07.01.2000**

(84) Designated Contracting States:
DE FR NL
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **08.01.1999 JP 264799**
18.08.1999 JP 23167399

(71) Applicant:
MITSUBISHI DENKI KABUSHIKI KAISHA
Tokyo 100-8310 (JP)

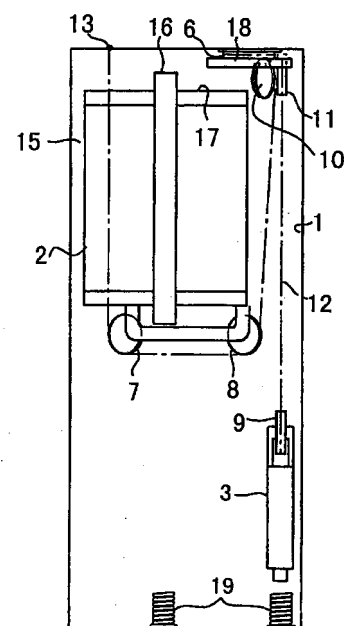
(72) Inventors:
• **Hashiguchi, Naoki**
Chiyoda-ku, Tokyo 100-8310 (JP)
• **Inoue, Masaya**
Chiyoda-ku, Tokyo 100-8310 (JP)
• **Katou, Kunio**
Chiyoda-ku, Tokyo 100-0004 (JP)

(74) Representative: **HOFFMANN - EITLÉ**
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

(54) **Cable guide and drive machinery position for elevator**

(57) There is described an elevator system which can be installed in a shaft accommodated within the height of the top floor of a building and in which a hoisting machine can be disposed within the shaft. A couple of turning pulleys for changing a main cable extending between a car and a counterweight from a vertical direction to a horizontal direction are provided in a space between the edge of the car and the interior wall surface of a shaft. A hoisting machine on which a drive sheave is provided in a rotatable manner such that the rotor axis of the drive sheave is oriented vertically is provided at the upper end of the shaft, such that the lower end of the hoisting machine is located at a position higher than the lower edges of the turning pulleys. As a result, the hoisting machine can be disposed in the shaft accommodated within the height of the top floor of a building, and the main cable can extend between the car and the hoisting machine. The elevator system can be installed within the shaft accommodated within the height of the top floor, thereby diminishing construction cost required for ensuring a space for installing the elevator system.

FIG. 1



EP 1 018 480 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 10 0130

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.7)
A	EP 0 202 525 A (GEBAUER & CIE) 26 November 1986 (1986-11-26) * figure 5 *	1	B66B11/00
D,A	--- PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10, 31 August 1998 (1998-08-31) & JP 10 139321 A (INVENTIO AG), 26 May 1998 (1998-05-26) * abstract * -----	1-3,5,6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B66B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		8 January 2001	Salvador, D
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention	
X : particularly relevant if taken alone		E : earlier patent document, but published on, or after the filing date	
Y : particularly relevant if combined with another document of the same category		D : document cited in the application	
A : technological background		L : document cited for other reasons	
O : non-written disclosure		
P : intermediate document		& : member of the same patent family, corresponding document	

EPO FORM 1503 03.02 (P04C01)

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

EP 00 10 0130

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.

08-01-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0202525 A	26-11-1986	CH 666673 A	15-08-1988
		DE 3661725 D	16-02-1989
JP 10139321 A	26-05-1998	CA 2220582 A	11-05-1998
		EP 0841283 A	13-05-1998
		US 6006865 A	28-12-1999

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82