

Title (en)

Suspended load steadying control device

Title (de)

Regeleinrichtung zum Halten von hängenden Lasten

Title (fr)

Dispositif de commande de la stabilisation pour une charge suspendue

Publication

EP 0841294 A2 19980513 (EN)

Application

EP 97308303 A 19971020

Priority

JP 29604896 A 19961108

Abstract (en)

A trolley 12 travels along rails 11 while suspending a load 14 by a rope 13. The trolley 12 has a trolley displacement detector 21 for detecting a trolley position x1, a trolley speed detector 22 for detecting a trolley speed x2, and a swing motion detector 23 for detecting a swing displacement x3 and a swing speed x4 of the suspended load 14. A control device 26 produces a speed command u based on the detected values x1, x2, x3 and x4. In response to the speed command u, a trolley drive device 15 is driven to run the trolley 12. When the trolley is to be moved to the target position by the control of the control device 26, control for steadying the suspended load while the trolley 12 is following a set speed is performed in the first half of control. As the trolley 12 approaches the target position, control for positioning the trolley and steadying the suspended load is performed. Thus, the swing of the suspended load is lessened not only at the target position, but also during the travel of the trolley. <IMAGE>

IPC 1-7

B66C 13/06

IPC 8 full level

B66C 13/06 (2006.01); **B66C 13/22** (2006.01)

CPC (source: EP KR)

B66C 13/063 (2013.01 - EP); **B66C 13/18** (2013.01 - KR)

Cited by

CN105152016A; EP2062845A3; CN105152017A; CN105152020A

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0841294 A2 19980513; **EP 0841294 A3 20000112**; **EP 0841294 B1 20040922**; DE 69730798 D1 20041028; DE 69730798 T2 20050929; HK 1010533 A1 19990625; JP H10139369 A 19980526; KR 100237149 B1 20000302; KR 19980042223 A 19980817; MY 125688 A 20060830; SG 67435 A1 19990921; TW 380115 B 20000121

DOCDB simple family (application)

EP 97308303 A 19971020; DE 69730798 T 19971020; HK 98111733 A 19981104; JP 29604896 A 19961108; KR 19970058884 A 19971108; MY PI9705310 A 19971107; SG 1997003923 A 19971031; TW 86115681 A 19971023