Title (en)

Suspended load steadying/positioning control device

Title (de)

Regeleinrichtung zum Halten/zur Positionierung von hängenden Lasten

Title (fr)

Dispositif de commande de la stabilisation/position pour une charge suspendue

Publication

EP 0841295 A3 20000112 (EN)

Application

EP 97308305 A 19971020

Priority

JP 29489896 A 19961107

Abstract (en)

[origin: EP0841295A2] A suspended load steadying/positioning control device comprises independent drive devices 11, 14 for moving a crane 4 on two rails 1, the crane suspending a load by a rope 5 or the like and traveling on the rails 1 across them; position detectors 12, 15 for detecting the traveling position of the crane on each rail 1; speed detectors 13, 16 for detecting the traveling speed of the crane on each rail 1; a suspended load swing displacement detector 17; and an arithmetic means 21 for calculating, based on inputs, operation commands for the drive devices 11, 14 at two locations, the inputs being the measured values of the traveling positions at two locations by the position detectors 12, 15, the measured values of the speeds at two locations by the speed detectors 13, 16, and the measured value of the displacement of the suspended load by the suspended load swing displacement detector 17. Thus, the suspended load can be accurately positioned even in a crane having a structural deformation.
<IMAGE>

IPC 1-7

B66C 13/06; B66C 13/46

IPC 8 full level

B66C 13/06 (2006.01); **B66C 13/22** (2006.01); **B66C 13/46** (2006.01)

CPC (source: EP KR)

B66C 13/063 (2013.01 - EP); **B66C 13/18** (2013.01 - KR); **B66C 13/46** (2013.01 - EP)

Citation (search report)

- [A] WO 9505336 A1 19950223 - CAILLARD [FR], et al
- [A] EP 0583816 A1 19940223 - FINMECCANICA SPA [IT]
- [A] EP 0677478 A2 19951018 - SAMSUNG HEAVY IND [KR]

Cited by

CN103253600A; DE19907989B4; US10207903B2; WO02095520A1; WO2005049285A1; US7648036B2; US7289875B2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0841295 A2 19980513; **EP 0841295 A3 20000112**; **EP 0841295 B1 20040922**; DE 69730799 D1 20041028; DE 69730799 T2 20050929; HK 1010530 A1 19990625; JP H10139368 A 19980526; KR 100237150 B1 20000302; KR 19980042184 A 19980817; MY 126395 A 20060929; SG 67437 A1 19990921; TW 379201 B 20000111

DOCDB simple family (application)

EP 97308305 A 19971020; DE 69730799 T 19971020; HK 98111728 A 19981104; JP 29489896 A 19961107; KR 19970058633 A 19971107; MY PI9705309 A 19971107; SG 1997003930 A 19971031; TW 86115682 A 19971023