

Title (en)

DEVICE FOR CONTROLLING AUTOMATICALLY THE POSITION AND THE OSCILLATIONS OF A SUSPENDED LOAD DURING ITS TRANSPORTATION BY A LIFTING DEVICE

Publication

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Application

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Priority

FR 8905238 A 19890414

Abstract (en)

[origin: EP0394147A1] Device for controlling automatically the position and the oscillations of a suspended load during its transportation by a lifting device, comprising: - at least one guide means on which moves a translationally moveable carriage, actuated by a motor, to which is hooked a cable (or a rod) from the other end of which is suspended the load to be transported; - at least one position sensor, - an angle sensor, arranged on the carriage, characterised in that it comprises: - a first control loop comprising: . a first comparator (22> . a proportional corrector (23> . a second so-called position control loop, comprising: . a second comparator (20> . a proportional and integral corrector (21> - an adder (24). Application to any transportation of a suspended load requiring special conditions. <IMAGE>

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IPC 8 full level

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CPC (source: EP)

B66C 13/063 (2013.01); **B66C 13/46** (2013.01)

Citation (examination)

- PATENT ABSTRACTS OF JAPAN tome 4, no. 17 (M-91), 9 février 1980, page 86
- FOERDERN UND HEBEN tome 36, no. 6, juin 1986, pages 413-419

Cited by

FR2775678A1; FR2703347A1; SG115447A1; GB2280045A; EP1334945A3; FR2708920A1; US5878896A; EP0611211A1; FR2701467A1; FR2698344A1; US5490601A; FR2704847A1; WO9505336A1; WO9745357A1

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