

Title (en)  
Suspended load swing displacement detector

Title (de)  
Messeinrichtung für Lastschwingungen

Title (fr)  
Détecteur de mouvement de va-et-vient de la charge

Publication  
**EP 0869096 B1 20040929 (EN)**

Application  
**EP 97308302 A 19971020**

Priority  
JP 29489796 A 19961107

Abstract (en)  
[origin: EP0869096A2] A swing displacement detector comprises a swing displacement detector 15 for detecting relative displacement  $x_l$  between a trolley 4 and a suspended load 6 in a crane suspending the suspended load 6 by a rope 5 or the like; a crane upper structure displacement detector 16 for detecting the displacement of a crane upper structure 1 supporting the trolley 4 from the ground surface; and an arithmetic means 17 for receiving as inputs the measured value  $x_l$  of suspended load displacement by the swing displacement detector 15, and the measured value  $x_2$  of crane upper structure displacement by the crane upper structure displacement detector 16, and for correcting the measured value  $x_l$  of suspended load displacement based on the difference between the measured value  $x_l$  of suspended load displacement and the measured value  $x_2$  of crane upper structure displacement. Thus, the vibrational component of the crane upper structure can be eliminated from the measured value of swing of the suspended load, whereby the swing component of the suspended load can be detected highly accurately. <IMAGE>

IPC 1-7  
**B66C 13/06**

IPC 8 full level  
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CPC (source: EP KR)  
**B66C 13/063** (2013.01 - EP); **B66C 13/18** (2013.01 - KR)

Cited by  
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