

Title (en)
LOAD HANDLING SYSTEM FOR A LIFTING ARRANGEMENT

Title (de)
LASTENHANDHABUNGSSYSTEM FÜR EINE HUBANORDNUNG

Title (fr)
SYSTÈME DE MANUTENTION DE CHARGE POUR UN AGENCEMENT DE LEVAGE

Publication
EP 3428110 B1 20200108 (EN)

Application
EP 17180558 A 20170710

Priority
EP 17180558 A 20170710

Abstract (en)
[origin: EP3428110A1] A load handling system (2) for a lifting arrangement (4) for a free-hanging load (6). The load handling system (2) comprises at least two ranging load radio units (8) structured to be arranged at said load (6) at separate positions, at least three ranging fixed radio units (10) structured to be arranged in relation to said lifting arrangement (4) at separate positions, wherein said separate positions are known. Each of said at least three fixed radio units (10) is configured to measure and determine a distance to each of said ranging load radio units (8), and to generate distance signals (12) in dependence thereto. At least one acceleration sensor (14) and at least one angular velocity sensor (18) are provided and structured to be arranged at the load (6), and configured to generate an acceleration signal (16), and an angular velocity signal (20) respectively. The load handling system comprises a processing unit (22) configured to receive said distance signals (12), said acceleration signal (16) and wireless angular velocity signal (20), and to calculate positions of said at least two ranging load radio units (8) in dependence of distance values of said distance signals (12). The processing unit (22) is configured to apply an estimation algorithm on said calculated positions, acceleration values and angular velocities, in order to determine three rotation angles (24) being defined as angles at which the load is rotated about x-,y-, and z-axis with respect to said lifting arrangement.

IPC 8 full level
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CPC (source: EP)
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