

Title (en)
ELEVATOR MONITORING SYSTEM FOR MONITORING SUSPENSION TRACTION MEANS AND METHOD FOR MONITORING SUSPENSION TRACTION MEANS

Title (de)
AUFZUGÜBERWACHUNGSSYSTEM ZUR ÜBERWACHUNG DER AUFHÄNGUNGSZUGMITTEL UND VERFAHREN ZUR ÜBERWACHUNG DER AUFHÄNGUNGSZUGMITTEL

Title (fr)
SYSTÈME DE SURVEILLANCE D'ASCENSEUR PRÉSENTE DES MOYENS DE TRACTION DE SUSPENSION ET PROCÉDÉ DE SURVEILLANCE DE MOYENS DE TRACTION DE SUSPENSION

Publication
EP 3428101 A1 20190116 (EN)

Application
EP 17181508 A 20170714

Priority
EP 17181508 A 20170714

Abstract (en)
An elevator monitoring system (10) for monitoring suspension traction means is proposed, wherein the elevator monitoring system (10) comprises:
- a first suspension traction means (28) which holds an elevator cabin (12) and a counter weight (14), wherein a first end of the first suspension traction means (28) is attached fixedly at a first cabin side fix point (30), and wherein a second end of the first suspension traction means (28), which is opposed to the first end of the first suspension traction means (28), is attached fixedly at a second counter weight side fix point (32), - a second suspension traction means (29) which holds the elevator cabin (12) and the counter weight (14) movably, wherein a first end of the second suspension traction means (29) is attached fixedly at a third cabin side fix point (34), and wherein a second end of the second suspension traction means (29), which is opposed to the first end of the second suspension traction means (29), is attached fixedly at a fourth counter weight side fix point (36), - a first force sensor (40) disposed at the first cabin side fix point (30) and/or a second force sensor (42) disposed at the second counter weight side fix point (32), as well as a third force sensor (44) disposed at the third cabin side fix point (34) and/or a fourth force sensor (46) disposed at the fourth counter weight side fix point (36), wherein the force sensors (40, 42, 44, 46) are adapted for measuring a force exerted on the respective suspension traction means at the respective fix point and for generating measurement values corresponding to the measured force, respectively, - at least one comparison unit, wherein the comparison unit is adapted for receiving the measurement values from the first force sensor (40), from the second force sensor (42), from the third force sensor (44) and/or from the fourth force sensor (46), and for comparing the measurement value of at least one of the first force sensor (40) and the second force sensor (42) with the measurement value of at least one of the third force sensor (44) and fourth force sensor (46), and - a warning signal generating unit (80) for generating a warning signal and/or stopping the operation of the elevator cabin (12) if the comparison unit determines that a difference and/or a ratio of the measurement value of at least one of the first force sensor (40) and the second force sensor (42) and the measurement value of at least one of the third force sensor (44) and the fourth force sensor (46) is larger than a first preset value.

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Citation (search report)
• [X1] US 6123176 A 20000926 - O'DONNELL HUGH J [US], et al
• [X1] JP 2015086027 A 20150507 - HITACHI BUILDING SYS CO LTD
• [X1] CN 205472086 U 20160817 - LIU BIN

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