

Title (en)
METHOD AND DEVICE FOR MONITORING A PERSON TRANSPORT INSTALLATION USING A REGISTRATION DEVICE AND A DIGITAL DOPPELGÄNGER

Title (de)
VERFAHREN UND VORRICHTUNG ZUM ÜBERWACHEN EINER PERSONENTRANSPORTANLAGE UNTER VERWENDUNG EINER ERFASSUNGSEINRICHTUNG UND EINES DIGITALEN DOPPELGÄNGERS

Title (fr)
PROCÉDÉ ET DISPOSITIF DE SURVEILLANCE D'UNE INSTALLATION DE TRANSPORT DE PASSAGERS À L'AIDE D'UN DISPOSITIF DE DÉTECTION ET D'UN DOUBLE NUMÉRIQUE

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Application
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Abstract (en)
[origin: WO2020016017A1] The invention relates to a method (100) and a device (1) for monitoring a state of a physical passenger transport system (2). The method (100) comprises monitoring the state of the passenger transport system (2) using an updated digital data record double (102) that reproduces characterising properties of components of the physical passenger transport system (2) in an actual configuration of the passenger transport system after assembly and installation thereof in a building (5), in a machine-processable manner. At least one detection device (200) is arranged in the transport belt (7) of the physical passenger transport system (2), which detects accelerations (ax, ay, az) and changes of position (α , β , γ) in all three axes (x, y, z) during operation, which are transmitted to the virtual transport belt (107) of the updated digital data record double (102). Forces, impulses and vibrations resulting from the dynamic behaviour of the transport belt (107) and acting on the virtual components (129) of the virtual transport belt (107), corresponding to the physical components, and on the virtual components (126, 128) interacting with the virtual transport belt (107), are determined and evaluated by dynamic simulations performed by means of the updated digital data record double (102).

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