

Title (en)

Hoist unit and load-bearing medium for such a unit

Title (de)

AUFZUGSANLAGE UND TRAGMITTEL FÜR EINE SOLCHE ANLAGE

Title (fr)

Installation d'ascenseur et moyen de support pour une telle installation

Publication

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Application

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Abstract (en)

[origin: WO2011045215A1] The invention relates to an elevator system having a suspension and a suspension for supporting and/or moving at least one elevator car (3) in an elevator system (1), wherein the suspension (12) can be guided and driven at least by means of a sheave (4), in particular a traction sheave (4.1) of a drive machine (2) of an elevator system (1), and the suspension (12) comprises a body (15) made of a polymer and at least one tie beam (22) extending in the longitudinal direction of the suspension (12) and embedded in the body (15) and made of wires (42) and is present as a cord or rope. A thickest wire (43) having the greatest wire diameter d in the tie beam (22) comprises a bending stress sb in a range from $s_b = 350\text{N/mm}^2$ to 900N/mm^2 when bending the tie beam (18) about a least bending radius r, and wherein the bending stress sb results as a function of the elastic modulus E and the diameter d of the thickest wire (26), according to the following equation: $s_b = (d \cdot E) / 2r$, wherein the suspension (12) is run about a smallest pulley having a least pulley diameter D in the elevator system (1), the pulley diameter D thereof corresponding to no more than two times the least bending radius r: $D = 2r$.

IPC 8 full level

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