

Title (en)
ELEVATOR ROPE

Title (de)
AUFZUGSEIL

Title (fr)
CÂBLE D'ASCENSEUR

Publication
EP 3683179 A1 20200722 (EN)

Application
EP 18853024 A 20180717

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• JP 2017173775 A 20170911
• JP 2018026671 W 20180717

Abstract (en)
Elevator ropes that allow reduction of the amount of change of rope elongation that results from a change in rope tension due to passengers getting in and off an elevator even if the breaking strength of ropes is improved to reduce the number of ropes are provided. An elevator rope of the present invention is an elevator rope formed by intertwisting a plurality of strands formed by intertwisting a plurality of steel wires, wherein when a diameter of the elevator rope is defined as d (mm), intervals between turns of the strands are defined as a rope pitch $P_{₁}$, and intervals between turns of the steel wires are defined as a strand pitch $P_{₂}$, a ratio a of $P_{₁}$ to d , a ratio b of $P_{₂}$ to d and a breaking strength T (N) of the elevator rope satisfy the following Formula A. In Formula A explained above, E denotes a modulus of longitudinal elasticity (MPa) of a material used in the elevator rope, G denotes a modulus of transverse elasticity (MPa) of the material used in the elevator rope, and N denotes the number of the strands.

IPC 8 full level
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