CLAIMS

1. An elevator comprising:

a first elevator unit vertically movable in a hoistway;

a second elevator unit vertically movable in the hoistway;

a suspension roping comprising one or more belt-shaped suspension ropes interconnecting the first elevator unit and the second elevator unit;

a drive wheel for moving said one or more belt-shaped suspension ropes, wherein the drive wheel has a first side and second side opposite to the first side; and

a plurality of cambered diverting wheels, wherein each of the cambered diverting wheels are cambered in a direction perpendicular to a radial direction of the respective cambered diverting wheel;

said one or more belt-shaped suspension ropes each passing around the drive wheel and comprising consecutively:

a first rope section extending between the drive wheel and the first elevator unit; and

a second rope section extending between the drive wheel and the second elevator unit,

wherein both rope sections diverge from the drive wheel towards the first side of the drive wheel, the first rope section passing over a first cambered diverting wheel, and resting against a cambered circumferential surface area thereof, and therefrom down to the first elevator unit, and the second rope section passing over a second cambered diverting wheel, and resting against a cambered circumferential surface area thereof, and therefrom down to the second elevator unit,

wherein the drive wheel and the plurality of cambered diverting wheels are located above the first and second elevator units,

wherein the first elevator unit and the second elevator unit are spaced apart in a width direction,

wherein the first rope section and the second rope section are continuously separated in said width direction from a point at which they diverge from the drive wheel towards the first and second elevator units, respectively, and

wherein the first rope section diverges from the drive wheel obliquely downwards with respect to the hoistway to the first cambered diverting wheel, and the second rope section diverges from the drive wheel obliquely downwards with respect to the hoistway to the second cambered diverting wheel.

2. The elevator according to claim 1, wherein the drive wheel comprises a drive wheel circumferential surface area that is cambered, for each of said one or more ropes against which the ropes are arranged to rest.

3. The elevator according to claim 1, wherein one of the elevator units comprises an elevator car and the second comprises a counterweight or a second elevator car.

4. The elevator according to claim 1, wherein each of said one or more ropes comprises one or more continuous load bearing members extending in longitudinal direction of the rope throughout the length of the rope, which load bearing member(s) is/are made of composite material comprising reinforcing fibers embedded in polymer matrix.

5. The elevator according to claim 1, wherein each of said one or more ropes comprises one or more continuous load bearing members extending in longitudinal direction of the rope throughout the length of the rope, which load bearing member(s) is/are embedded in elastic coating forming the surface of the rope.

6. The elevator according to claim 1, wherein each cambered circumferential surface area as well as the surface of the rope resting against it are smooth.

7. The elevator according to claim 1, wherein each rope passes around the diverting wheels and around the drive wheel, with a wide side of each rope located on the diverting wheels and the drive wheel.

8. The elevator according to claim 1, further comprising a machine room housing the drive wheel and the plurality of cambered diverting wheels,

wherein the machine room is located above the hoistway.