What is claimed is:

1. A method for modernizing an elevator, wherein the suspension of an old elevator is modified, the old elevator comprising:

an elevator car;

a counterweight;

an elevator hoistway;

a hoisting machine with a traction sheave in a machine room above the elevator hoistway, for moving the elevator car in the elevator hoistway via the hoisting roping;

old hoisting roping comprising one or more hoisting ropes, the old hoisting roping passing around the traction sheave and connecting the elevator car and the counterweight, and passing from the traction sheave to the elevator car or the counterweight, and to a rope clamp that is in connection with the elevator car or the counterweight, via an aperture in the floor of the machine room,

said method comprising the steps of:

arranging a first rope clamp and a second rope clamp in a top part of the elevator hoistway such that the first rope clamp and the second rope clamp are supported by a same support element supported in its position;

removing the old hoisting roping; and

installing a new hoisting roping by guiding the new hoisting roping to pass around the traction sheave and to connect the elevator car and the counterweight, and guiding the new hoisting roping to pass from the traction sheave to the elevator car or the counterweight via the aperture in the floor of the machine room, the new hoisting roping comprising a plurality of ropes, including:

a first part that is guided to pass to the elevator car or the counterweight to a first diverting pulley that is in connection with the elevator car or the counterweight, and onwards from the first diverting pulley back upwards to the first rope clamp in the top part of the elevator hoistway; and

a second part that is guided to pass to the elevator car or the counterweight to a second diverting pulley that is in connection with the elevator car or the counterweight, and onwards from the second diverting pulley back upwards to the second rope clamp in the top part of the elevator hoistway.

2. The method according to claim 1, wherein the number of ropes of the first part of the

hoisting roping that are side-by-side on the first diverting pulley is essentially as great as the number of ropes of the second part of the hoisting roping that are side-by-side on the second diverting pulley, and the combined number of ropes of the rope parts is the same as the number of hoisting ropes of the hoisting roping that are side-by-side on the traction sheave.

3. The method according to claim 1, wherein the first part and the second part arriving at the first and second diverting pulleys from the traction sheave are at a first distance from each other, and the first part is guided when the first part passes under the first diverting pulley to bend in a first direction and the second part is guided when the second part passes under the second diverting pulley to bend in a second direction such that the first part and the second part that leave the first and second diverting pulleys upwards are at a second distance from each other that is essentially greater than the first distance.

4. The method according to claim 1, wherein the new hoisting roping is guided to pass from the traction sheave to the elevator car or the counterweight via the aperture in the floor of the machine room, and the aperture is at least essentially the same aperture via which the old hoisting roping passed from the traction sheave to the elevator car or the counterweight.

5. The method according to claim 1, wherein the first and the second rope clamps in the top part of the elevator hoistway are arranged to take vertical support force from the top surface of the floor of the machine room or from the structure that is on top of the floor by means of said same support element that extends through the floor.

6. The method according to claim 5, wherein said same support element is fixed to said structure that is on top of the floor.

7. The method according to claim 5, wherein said same support element extends onto the top surface of the floor or of the said structure that is on top of the floor, from where said same support element takes vertical support force.

8. The method according to claim 5, wherein said structure on top of the floor is a bedplate.

9. The method according to claim 1, further comprising the step of installing said same

support element into its position.

10. The method according to claim 1, further comprising the step of installing the first and second diverting pulleys in connection with the elevator car and counterweight.

11. The method according to claim 1, further comprising the step of fixing the first and second rope clamps in said same support element.

12. The method according to claim 1, wherein said same support element extends through the floor via the same aperture via which the new hoisting roping passes to the elevator car or counterweight.

13. The method according to claim 1, wherein the first and second rope clamps are in their entirety below the floor of the machine room and there is no aperture in the floor at the point of the first and second rope clamps.

14. The method according to claim 1, wherein the first and second rope clamps that are supported on said same support element that is supported in its position are at a horizontal distance from each other, the horizontal distance being greater than a width of the aperture in the direction of the horizontal distance.

15. The method according to claim 1, wherein the first and second rope clamps that are supported on said same support element that is supported in its position are at a horizontal distance from each other, the horizontal distance being essentially greater than a width of a rope mat to be lowered from the traction sheave.

16. The method according to claim 1, wherein said same support element comprises a part that extends through the floor from the elevator hoistway, and on the elevator hoistway side, a first part of said part that protrudes to a first side, on which the first rope clamp is disposed, and a second part of said part that protrudes to a second side, on which the second rope clamp is disposed, such that the first and the second rope clamps are at a horizontal distance from each other.

17. The method according to claim 1, wherein said same support element comprises a part

that extends through the floor from the elevator hoistway, and on the machine room side, first parts of said part that protrude to a first side and to a second side, said first parts extending over the top surface of the floor or of a structure supported against the floor.

18. The method according to claim 1, wherein said same support element comprises a part that extends through the floor from the elevator hoistway, the part being tubular or trough-shaped, and the new hoisting roping passes at least partly inside the tubular or trough-shaped part.

19. The method according to claim 1, wherein said same support element is a horizontal beam that is below the floor of the machine room.

20. The method according to claim 1, wherein the first and second rope clamps are in connection with said same support element when said same support element is installed into position in the elevator hoistway.

21. The method according to claim 1, further comprising the steps of:

making fixing locations for the first and second rope clamps in said same support element before said same support element is installed into its position;

fixing the first and second rope clamps into the fixing locations after installation of said same support element into position, of which fixing locations said same support element comprises a plurality per each of the first and second rope clamps;

adjusting a distance between the first and second rope clamps to be suitable; and

after said step of adjusting, fixing the first and second rope clamps into the fixing locations at their points.

22. The method according to claim 1, wherein the first and second rope clamps comprise a fixing location for one or more ropes.

23. The method according to claim 1, wherein said same support element is supported on horizontal beams of the old elevator that are below the floor of the machine room.

24. The method according to claim 1, wherein said same support element is a horizontal beam that is below the floor of the machine room, the beam being fixed at ends thereof to

guide rails of the elevator car.

25. The method according to claim 1, wherein shafts of the first and second diverting pulleys are horizontal and at an angle to each other.

26. The method according to claim 1, wherein shafts of the first and second diverting pulleys are horizontal and parallel.

27. The method according to claim 1, wherein the new hoisting roping is guided to pass from the traction sheave to the elevator car or to the counterweight without forming new apertures in the floor for the new hoisting roping.

What is claimed is:

1. A method for modernizing an elevator, wherein the suspension of an old elevator is modified, the old elevator comprising:

an elevator car;

a counterweight;

an elevator hoistway;

a hoisting machine with a traction sheave in a machine room above the elevator hoistway, for moving the elevator car in the elevator hoistway via the hoisting roping;

old hoisting roping comprising one or more hoisting ropes, the old hoisting roping passing around the traction sheave and connecting the elevator car and the counterweight, and passing from the traction sheave to the elevator car or the counterweight, and to a rope clamp that is in connection with the elevator car or the counterweight, via an aperture in the floor of the machine room,

said method comprising the steps of:

arranging a first rope clamp and a second rope clamp in a top part of the elevator hoistway such that the first rope clamp and the second rope clamp are supported by a same support element supported in its position;

removing the old hoisting roping; and

installing a new hoisting roping by guiding the new hoisting roping to pass around the traction sheave and to connect the elevator car and the counterweight, and guiding the new hoisting roping to pass from the traction sheave to the elevator car or the counterweight via the aperture in the floor of the machine room, the new hoisting roping comprising a plurality of ropes, including:

a first part that is guided to pass to the elevator car or the counterweight to a first diverting pulley that is in connection with the elevator car or the counterweight, and onwards from the first diverting pulley back upwards to the first rope clamp in the top part of the elevator hoistway; and

a second part that is guided to pass to the elevator car or the counterweight to a second diverting pulley that is in connection with the elevator ca or the counterweightr, and onwards from the second diverting pulley back upwards to the second rope clamp in the top part of the elevator hoistway.

2. The method according to claim 1, wherein the number of ropes of the first part of the hoisting roping that are side-by-side on the first diverting pulley is essentially as great as the number of ropes of the second part of the hoisting roping that are side-by-side on the second diverting pulley, and the combined number of ropes of the rope parts is the same as the number of hoisting ropes of the hoisting roping that are side-by-side on the traction sheave.

3. The method according to claim 1, wherein the first part and the second part arriving at the first and second diverting pulleys from the traction sheave are at a first distance from each other, and the first part is guided when the first part passes under the first diverting pulley to bend in a first direction and the second part is guided when the second part passes under the second diverting pulley to bend in a second direction such that the first part and the second part that leave the first and second diverting pulleys upwards are at a second distance from each other that is essentially greater than the first distance.

4. The method according to claim 1, wherein the new hoisting roping is guided to pass from the traction sheave to the elevator car or the counterweight via the aperture in the floor of the machine room, and the aperture is at least essentially the same aperture via which the old hoisting roping passed from the traction sheave to the elevator car or the counterweight.

5. The method according to claim 1, wherein the first and the second rope clamps in the top part of the elevator hoistway are arranged to take vertical support force from the top surface of the floor of the machine room or from the structure that is on top of the floor by means of said same support element that extends through the floor.

6. The method according to claim 1, further comprising the step of installing said same support element into its position.

7. The method according to claim 1, further comprising the step of installing the first and second diverting pulleys in connection with the elevator car and counterweight.

8. The method according to claim 1, further comprising the step of fixing the first and second rope clamps in said same support element.

9. The method according to claim 1, wherein said same support element extends through the floor via the same aperture via which the new hoisting roping passes to the elevator car or counterweight.

10. The method according to claim 1, wherein the first and second rope clamps are in their entirety below the floor of the machine room and there is no aperture in the floor at the point of the first and second rope clamps.

11. The method according to claim 5, wherein said same support element is fixed to said structure that is on top of the floor.

12. The method according to claim 5, wherein said same support element extends onto the top surface of the floor or of the said structure that is on top of the floor, from where said same support element takes vertical support force.

13. The method according to claim 5, wherein said structure on top of the floor is a bedplate.

14. The method according to claim 1, wherein the first and second rope clamps that are supported on said same support element that is supported in its position are at a horizontal distance from each other, the horizontal distance being greater than a width of the aperture in the direction of the horizontal distance.

15. The method according to claim 1, wherein the first and second rope clamps that are supported on said same support element that is supported in its position are at a horizontal distance from each other, the horizontal distance being essentially greater than a width of a rope mat to be lowered from the traction sheave.

16. The method according to claim 1, wherein said same support element comprises a part that extends through the floor from the elevator hoistway, and on the elevator hoistway side, a first part of said part that protrudes to a first side, on which the first rope clamp is disposed, and a second part of said part that protrudes to a second side, on which the second rope clamp is disposed, such that the first and the second rope clamps are at a horizontal distance from each other.

17. The method according to claim 1, wherein said same support element comprises a part that extends through the floor from the elevator hoistway, and on the machine room side, first parts of said part that protrude to a first side and to a second side, said first parts extending over the top surface of the floor or of a structure supported against the floor.

18. The method according to claim 1, wherein said same support element comprises a part that extends through the floor from the elevator hoistway, the part being tubular or trough-shaped, and the new hoisting roping passes at least partly inside the tubular or trough-shaped part.

19. The method according to claim 1, wherein said same support element is a horizontal beam that is below the floor of the machine room.

20. The method according to claim 1, wherein the first and second rope clamps are in connection with said same support element when said same support element is installed into position in the elevator hoistway.

21. The method according to claim 1, further comprising the steps of:

making fixing locations for the first and second rope clamps in said same support element before said same support element is installed into its position;

fixing the first and second rope clamps into the fixing locations after installation of said same support element into position, of which fixing locations said same support element comprises a plurality per each of the first and second rope clamps;

adjusting a distance between the first and second rope clamps to be suitable; and

after said step of adjusting, fixing the first and second rope clamps into the fixing locations at their points.

22. The method according to claim 1, wherein the first and second rope clamps comprise a fixing location for one or more ropes.

23. The method according to claim 1, wherein said same support element is supported on horizontal beams of the old elevator that are below the floor of the machine room.

24. The method according to claim 1, wherein said same support element is a horizontal beam that is below the floor of the machine room, the beam being fixed at ends thereof to guide rails of the elevator car.

25. The method according to claim 1, wherein shafts of the first and second diverting pulleys are horizontal and at an angle to each other.

26. The method according to claim 1, wherein shafts of the first and second diverting pulleys are horizontal and parallel.

27. The method according to claim 1, wherein the new hoisting roping is guided to pass from the traction sheave to the elevator car or to the counterweight without forming new apertures in the floor for the new hoisting roping.