CLAIMS

1. A rope clamp (10,20) for clamping one or more ropes (R) comprising

a first clamping member (11, 21) having a first clamping face (12,22) for being set against one or more ropes (R) to be clamped;

a second clamping member (13,23) having a second clamping face (14,24) for being set against one or more ropes (R) to be clamped;

said clamping faces (12,14;22,24) defining between them a gap for receiving one or more ropes (R), the clamping members (11,21) being relatively movable towards each other such that the gap is narrowed for clamping one or more ropes (R) between the clamping faces thereof**,** and

means (30, 31) for moving the clamping members towards each other such that the gap is narrowed,

characterized in that the first clamping member (11,21) and/or the second clamping member (13,23) comprises

a metallic face part (15,25) forming the clamping face (14,24) of the clamping member in question; and

a metallic body part (16,26) on the back side of the face part (15,25); and

an elastic intermediate part (17,27) made of elastic material between the body part (16, 26) and the face part (15, 25) for elastically transmitting force between the body part (16, 26) and the face part (15, 25).

2. A rope clamp according to claim 1, wherein the elastic intermediate part (17,27) is made of elastomer, such as rubber, most preferably neoprene.

3. A rope clamp according to any of the preceding claims, wherein the elastic intermediate part (17,27) is made of material having 65-75 Shore A hardness, most preferably 70 Shore A hardness.

4. A rope clamp according to any of the preceding claims, wherein the face part (15, 25) comprises aluminum.

5. A rope clamp according to any of the preceding claims, wherein the metallic face part (15, 25) is sheet-like.

6. A rope clamp according to any of the preceding claims, wherein the elastic intermediate part (17,27) is sheet-like.

7. A rope clamp according to any of the preceding claims, wherein said metallic face part (15,25) of the first clamping member (11,21) and/or the second clamping member (13,23) forms the clamping face (14,24) of the clamping member (13,23) in question for several ropes (R).

8. A rope clamp according to any of the preceding claims, wherein the ropes (R) are belt-like ropes, and said clamping face(s) (12,22;14,24) of the first clamping member and/or second clamping member (11, 21;13,23) is/are suitable for being set against the wide side of the one or more ropes (R) to be clamped.

9. A rope clamp according to any of the preceding claims, wherein the metallic face part (15,25), the elastic intermediate part and the metallic body part (16,26) are stacked against each other, and together form a three-layered structure.

10. A rope clamp according to any of the preceding claims, wherein the means (30,31) for moving the clamping members towards each other are arranged to act on the body part(s) (16, 26) of the first and/or the second clamping member (11, 21).

11. A rope clamp according to any of the preceding claims, wherein the body part (16, 26) is made of metal harder than the material of the metallic face part (15,25), for example the body part (16, 26) is made of steel and the a metallic face part (15,25) comprises aluminium.

12. A rope clamp according to any of the preceding claims, the rope clamp (10,20) comprises one or more metallic blocking members (18,28) for blocking the clamping members (11,21), in particular the body parts

(15,25) thereof, from moving towards each other beyond a certain limit distance (d1).

13. An elevator arrangement, comprising an elevator car (1), and one or more suspension ropes (R) for suspending the elevator car (1), said one or more suspension ropes (R) being connected to the elevator car (1), and a rope clamp (10, 20) arranged to clamp said one or more suspension ropes (R), **characterized** in that the rope clamp (10, 20) is as defined in any of the preceding claims 1 to 12.

14. An elevator arrangement according to the claim 13, wherein each of said one or more ropes (R) comprises one or more continuous load bearing members (51) extending in longitudinal direction of the rope (R) throughout the length of the rope (R), which load bearing member(s) (51) is/are made of composite material comprising reinforcing fibers (f) embedded in polymer matrix (m).

15. An elevator arrangement according to any of the preceding claims 13 to 14, wherein the rope (R) comprises one or more continuous load bearing members (51) extending in longitudinal direction of the rope (R) throughout the length of the rope (R), which load bearing member(s) (51) is/are embedded in elastic coating (50) forming the surface of the rope.

16. An elevator arrangement according to any of the preceding claims 13 to 15, wherein the rope clamp (10) is arranged to fix said one or more ropes (R) immovably to a structure (19), which structure is preferably a structure of the elevator car (1) or a stationary part of the building in which the elevator is installed.

17. An elevator arrangement according to any of the preceding claims 13 to 16, wherein the arrangement is an arrangement for releasing a safety gear (41) from a wedged state, comprising a pulling device (40) connected to the rope clamp (20) clamping said one or more suspension ropes (R) for suspending the elevator car (1), and arranged to pull the elevator car (1) upwards by pulling the rope clamp (20)

clamping said one or more suspension ropes (R) for suspending the elevator car (1) such that the elevator car (1) rises.

CLAIMS

1. A rope clamp for clamping one or more ropes comprising

a first clamping member having a first clamping face for being set against one or more ropes to be clamped;

a second clamping member having a second clamping face for being set against one or more ropes to be clamped;

said clamping faces defining between them a gap for receiving one or more ropes, the clamping members being relatively movable towards each other such that the gap is narrowed for clamping one or more ropes between the clamping faces thereof**,** and

means for moving the clamping members towards each other such that the gap is narrowed,

characterized in that the first clamping member and/or the second clamping member comprises

a metallic face part forming the clamping face of the clamping member in question; and

a metallic body part on the back side of the face part; and

an elastic intermediate part made of elastic material between the body part and the face part for elastically transmitting force between the body part and the face part.

2. A rope clamp according to claim 1, wherein the elastic intermediate part is made of elastomer, such as rubber, most preferably neoprene.

3. A rope clamp according to any of the preceding claims, wherein the elastic intermediate part is made of material having 65-75 Shore A hardness, most preferably 70 Shore A hardness.

4. A rope clamp according to any of the preceding claims, wherein the face part comprises aluminum.

5. A rope clamp according to any of the preceding claims, wherein the metallic face part is sheet-like.

6. A rope clamp according to any of the preceding claims, wherein the elastic intermediate part is sheet-like.

7. A rope clamp according to any of the preceding claims, wherein said metallic face part of the first clamping member and/or the second clamping member forms the clamping face of the clamping member in question for several ropes.

8. A rope clamp according to any of the preceding claims, wherein the ropes are belt-like ropes, and said clamping face(s) of the first clamping member and/or second clamping member is/are suitable for being set against the wide side of the one or more ropes to be clamped.

9. A rope clamp according to any of the preceding claims, wherein the metallic face part, the elastic intermediate part and the metallic body part are stacked against each other, and together form a three-layered structure.

10. A rope clamp according to any of the preceding claims, wherein the means for moving the clamping members towards each other are arranged to act on the body part(s) of the first and/or the second clamping member.

11. A rope clamp according to any of the preceding claims, wherein the body part is made of metal harder than the material of the metallic face part, for example the body part is made of steel and the a metallic face part comprises aluminium.

12. A rope clamp according to any of the preceding claims, the rope clamp comprises one or more metallic blocking members for blocking the clamping members, in particular the body parts thereof, from moving towards each other beyond a certain limit distance.

13. An elevator arrangement, comprising an elevator car, and one or more suspension ropes for suspending the elevator car, said one or more suspension ropes being connected to the elevator car, and a rope

clamp arranged to clamp said one or more suspension ropes, **characterized** in that the rope clamp is as defined in any of the preceding claims 1 to 12.

14. An elevator arrangement according to the claim 13, 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.

15. An elevator arrangement according to any of the preceding claims 13 to 14, wherein the rope 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.

16. An elevator arrangement according to any of the preceding claims 13 to 15, wherein the rope clamp is arranged to fix said one or more ropes immovably to a structure, which structure is preferably a structure of the elevator car or a stationary part of the building in which the elevator is installed.

17. An elevator arrangement according to any of the preceding claims 13 to 16, wherein the arrangement is an arrangement for releasing a safety gear from a wedged state, comprising a pulling device connected to the rope clamp clamping said one or more suspension ropes for suspending the elevator car, and arranged to pull the elevator car upwards by pulling the rope clamp clamping said one or more suspension ropes for suspending the elevator car such that the elevator car rises.