CLAIMS

1. A spray head (1), comprising a fastening body (2), a spray head body (3) with at least one nozzle (4) and a thermally activated triggering device (5), said spray head body (3) being arranged into fastening body (2), into its cylinder space (21) to be movable between two positions, the first position, in which spray head is in the inactive state, and the second position, in which the spray head body is extended out in a ready position prior to activation of said thermally activated triggering device, said spray head body (3) being arranged to be movable by pressurized medium in relation to fastening body (2) from the first position to the second position, wherein a retaining arrangement (18, 19, 20) has been arranged between spray head body (3) and fastening body (2), and adapted to keep the spray head body (3) in the first position, until the pressure of the medium exceeds a preset value.

2. A spray head according to claim 1, wherein retaining arrangement (18, 19, 20) comprises a retaining element (20), or wherein a retaining arrangement has been formed using bonding agent, such as glue or soldering material.

3. A spray head according to claim 1 or 2, wherein retaining arrangement (18, 19, 20) comprises at least one groove (19) that is formed onto the spray head body, and at least one groove (18) that is formed onto the fastening body, as well as at least one retaining element (20), that is arranged between the spray head body and at least one of the grooves (18, 19) of the fastening body in the first position.

4. A spray head according to any of claims 1 - 3, wherein retaining arrangement (18, 19, 20) comprises retaining element (20), which is an elastic element, such as a sealer ring, for example an O-ring.

5. A spray head according to any of claims 1 - 4, where in the first position i.e. the protective position, as the spray head is in the inactive state, at least one nozzle (4) and triggering device (5) of the spray head are protected on the inside of the walls of fastening body (2), and in the second position, in which spray head body (3) is extended

out, where at least one nozzle (4) and triggering device (5) are not protected inside the walls of fastening body (2).

6. A spray head according to any of claims 1 - 5, wherein fastening body (2) comprises a cylinder space (21), or a channel section, whereby at least a part of spray head body (3) has been formed into a piston part, arranged through the effect of the pressurized medium to move in the cylinder space (21) from the first position to the second position.

7. A spray head according to any of claims 1 - 6, wherein spray head body (2) comprises a motion limiter device (13), such as a shoulder, and fastening body (1) comprises a corresponding surface (14) for the limiting device.

8. A spray head according to any of claims 1 - 7, wherein the spray head comprises a collar section (11), in which there is an opening (12), through which at least a part of spray head body (3) extends at least in the second position.

9. A spray head according to any of claims 1 - 8, wherein lower surface (10) of spray head body (3) is arranged in the first position to extend through opening (12) essentially to the same plane with fastening body (2) or with the outer surface (10) of collar section (11), arranged in connection with fastening body (2).

10. A spray head according to any of claims 8 - 9, wherein collar section (11) comprises a ledge section (15), fitted into fastening body (2), on the outside thereof, for example by means of threaded sections (16, 17).

11. A spray head according to claim 8, wherein the collar section (11) is an integral part of fastening body (2).

12. A spray head according to claim 8, wherein collar section (11) is an integral part of fastening part (23).

13. A spray head according to claim 8, wherein collar section (11) is an integral part of spray head body (3).

14. A spray head according to any of claims 1 - 10, wherein collar section (11) and fastening body (2) are detachable from their installation object, individually or together.

15. A spray head according to any of claims 1 - 10, wherein the position of collar section (11) in relation to fastening body (2) is adjustable.

16. A spray head according to any of claims 1 - 15, wherein the position of spray head body (3) in relation to fastening body (2) is adjustable at least in the first position.

17. A spray head according to any of claims 1 - 2, wherein retaining element (20) of the retaining arrangement is a ledge section, formed onto the spray head body or the fastening body, which in the first position is fitted into the corresponding part, such as a groove.

18. A spray head according to any of claims 1 - 17, wherein the pressure medium is the extinguishing medium or a medium of a separate pressure system.

19. The use of a spray head (1) according to any of claims 1 - 18 in a fire extinguishing system of a vehicle or a means of transportation, such as a train.

Claims

1. A spray head (1), comprising

a fastening body (2),

a spray head body (3) with at least one nozzle (4),

a thermally activated triggering device (5), said spray head body (3) being arranged into fastening body (2), into its cylinder space (21) to be movable between two positions,

the first position, in which spray head is in the inactive state, and

the second position, in which the spray head body is extended out, said spray head body (3) being arranged to be movable by pressurized medium in relation to fastening body (2) from the first position to the second position, and

a retaining arrangement (18, 19, 20) adapted to keep the spray head body (3) in the first position, until the pressure of the medium exceeds a preset value,

characterized in that

the retaining arrangement (18, 19, 20) has been arranged between spray head body (3) and fastening body (2), and

the retaining arrangement (18, 19, 20) comprises at least one groove (19) that is formed onto the spray head body, and at least one groove (18) that is formed onto the fastening body, as well as at least one retaining element (20), that is arranged between the spray head body and at least one of the grooves (18, 19) of the fastening body in the first position.

2. A spray head according to claim 1, wherein retaining arrangement (18, 19, 20) comprises a retaining element (20), or wherein a retaining arrangement has been formed using bonding agent, such as glue or soldering material.

3. A spray head according to claim 1 or 2, wherein retaining arrangement (18, 19, 20) comprises retaining element (20), which is an elastic element, such as a sealer ring, for example an O-ring.

4. A spray head according to any of the preceding claims, where in the first position i.e. the protective position, as the spray head is in the inactive state, at least one nozzle (4) and triggering device (5) of the spray head are protected on the inside of the walls of fastening body (2), and in the second position, in which spray head body (3) is extended out, where at least one nozzle (4) and triggering device (5) are not protected inside the walls of fastening body (2).

5. A spray head according to any of the preceding claims, wherein fastening body (2) comprises a cylinder space (21), or a channel section, whereby at least a part of spray head body (3) has been formed into a piston part, arranged through the effect of the pressurized medium to move in the cylinder space (21) from the first position to the second position.

6. A spray head according to any of the preceding claims, wherein spray head body (2) comprises a motion limiter device (13), such as a shoulder, and fastening body (1) comprises a corresponding surface (14) for the limiting device.

7. A spray head according to any of the preceding claims, wherein the spray head comprises a collar section (11), in which there is an opening (12), through which at least a part of spray head body (3) extends at least in the second position.

8. A spray head according to any of the preceding claims, wherein lower surface (10) of spray head body (3) is arranged in the first position to extend through opening (12) essentially to the same plane with fastening body (2) or with the outer surface (10) of collar section (11), arranged in connection with fastening body (2).

9. A spray head according to any of claims 7 - 8, wherein collar section (11) comprises a ledge section (15), fitted into fastening body (2), on the outside thereof, for example by means of threaded sections (16, 17).

10. A spray head according to claim 7, wherein the collar section (11) is an integral part of fastening body (2) or of fastening part (23), or of spray head body (3).

11. A spray head according to any of the preceding claims, wherein collar section (11) and fastening body (2) are detachable from their installation object, individually or together, or wherein the position of collar section (11) in relation to fastening body (2) is adjustable.

12. A spray head according to any of the preceding claims, wherein the position of spray head body (3) in relation to fastening body (2) is adjustable at least in the first position.

13. A spray head according to claim 1 or 2, wherein retaining element (20) of the retaining arrangement is a ledge section, formed onto the spray head body or the fastening body, which in the first position is fitted into the corresponding part, such as a groove.

14. A spray head according to any of the preceding claims, wherein the pressure medium is the extinguishing medium or a medium of a separate pressure system.

15. The use of a spray head (1) according to any of the preceding claims in a fire extinguishing system of a vehicle or a means of transportation, such as a train.