CLAIMS

1- A ~~gas discharge arrangement for a~~ refrigeration compressor~~, which comprises:~~ comprising a shell ~~(1)~~ carrying a gas outlet tube ~~(1a)~~ and housing a gas compression mechanism including a cylinder ~~(3)~~ and a cylinder cap ~~(10)~~, which defines, internally, a gas discharge chamber ~~(11)~~ and has a gas outlet ~~(13)~~; and a discharge tube ~~(20)~~, in a flexible plastic material, having an inlet end ~~(21)~~, coupled to the gas outlet ~~(13)~~, and an outlet end ~~(22)~~ coupled to the gas outlet tube ~~(1a)~~, wherein ~~characterized in that~~ at least one of the inlet end ~~(21)~~ and outlet end ~~(22)~~ of the discharge tube ~~(20)~~ is connected to a discharge part, defined in any one of the gas outlet ~~(13)~~ and the gas outlet tube ~~(1a)~~, by a tubular-shaped connecting element ~~(30)~~, having:

- a fixation portion ~~(31)~~, to be affixed in the interior of the respective discharge part ~~(1a,13)~~;

- an engaging portion ~~(32)~~ to be fitted, with interference, in the interior of one end of the discharge tube ~~(20)~~ and carrying a superficial indexing means ~~(33)~~, being spaced away from the fixation portion and projecting, radially outwardly from the engaging portion, which produces a corresponding radial deformation ~~(20a)~~ in the discharge tube ~~(20)~~; and at least one gripping means ~~(34)~~, superficially disposed between the superficial indexing means ~~(33)~~ and the fixation portion ~~(31)~~; and

- a retaining ring ~~(40)~~, being disposed around the end of the discharge tube ~~(20)~~ and radially compressing the latter in order that the gripping means ~~(34)~~ of the engaging portion ~~(32)~~ of the connecting element ~~(30)~~ be spiked in said discharge tube ~~(20)~~, and being axially retained, in at least one direction, by the radial deformation of the end of the discharge tube and, in an opposite direction, by the fixation portion.

~~2- The arrangement, according to claim 1, characterized in that the superficial indexing means (33) is spaced~~

~~away from the fixation portion (31) and projects, radially outwardly from the engaging portion (32), the retaining ring (40) being axially retained, in at least one direction, by the radial deformation (20a) of the end of the discharge tube (20) and, in an opposite direction, by the fixation portion (31).~~

2~~3~~- The ~~arrangement~~refrigeration compressor~~,~~ according to claim 1~~2~~, ~~characterized in that~~ wherein the retaining ring ~~(40)~~ has opposite end edges ~~(40a, 40b)~~, which are respectively seated against the radial deformation ~~(20a)~~ of the end of the discharge tube ~~(20)~~ and against the fixation portion ~~(31)~~ of the connecting element ~~(30)~~.

3~~4~~- The refrigeration compressor~~arrangement~~, according to claim 1~~2~~, ~~characterized in that~~ wherein the retaining ring ~~(40)~~ has an end edge ~~(40b)~~ axially seated and locked against the fixation portion ~~(31)~~ of the connecting element ~~(30)~~, and a free opposite end edge ~~(40a)~~, said retaining ring ~~(40)~~ being internally provided with a circumferential groove ~~(42)~~ housing and axially locking, in its interior, the radial deformation ~~(20a)~~ of the adjacent end of the discharge tube ~~(20)~~.

4~~5~~- The refrigeration compressor~~arrangement~~, according to any one of claims 1 to 3~~4~~, ~~characterized in that~~ wherein the superficial indexing means ~~(33)~~ is defined by a circumferential rib ~~(33a)~~ with a cross section in convex arc.

5~~6~~- The refrigeration compressor~~arrangement~~, according to any one of claims 1 to 4~~5~~, ~~characterized in that~~ wherein the gripping means ~~(34)~~ is in the form of a frusto-conical circumferential projection, with its smaller base ~~(34a)~~ coinciding with the contour of the engaging portion ~~(32)~~, and with its larger base ~~(34b)~~ defining an annular step projecting outward from the engaging portion ~~(32)~~

and turned to the fixation portion ~~(31)~~.

6~~7~~- The refrigeration compressor~~arrangement~~, according to any one of claims 1 to 5~~6~~, ~~characterized in that~~ wherein the engaging portion ~~(32)~~ has a free end ~~(32a)~~ and an opposite end ~~(32b)~~ joined to the fixation portion ~~(31)~~ and carrying a stop means ~~(35)~~ radially projecting outwardly from the contour of the engaging portion ~~(32)~~, spaced away from the gripping means ~~(34)~~.

7~~8~~- The refrigeration compressor~~arrangement~~, according to claim ~~7~~6, characterized ~~in that~~ wherein the stop means ~~(35)~~ is defined by an annular flange affixed around the opposite end ~~(32b)~~ of the engaging portion ~~(32)~~.

8~~9~~- The refrigeration compressor~~arrangement~~, according to any one of claims ~~7~~6 or ~~8~~7, ~~characterized in that~~ wherein the superficial indexing means ~~(33)~~ is spaced away from the free end ~~(32a)~~ of the engaging portion ~~(32)~~.

9~~10~~- The refrigeration compressor~~arrangement~~, according to any one of claims 1 to 8~~9~~, ~~characterized in that~~ wherein the connecting element ~~(30)~~ is made in a single piece.

10~~1~~- The refrigeration compressor~~arrangement~~, according to any one of claims 1 to 9~~10~~, ~~characterized in that~~ wherein the fixation portion ~~(31)~~ is cylindrical and affixed to the respective discharge part, defined in any one of the gas outlet ~~(13)~~ and the gas outlet tube ~~(1a)~~, by means of adhesive.

11~~2~~- The refrigeration compressor~~arrangement~~, according to any one of claims 1 to 9~~10~~, ~~characterized in that~~ wherein the fixation portion ~~(31)~~ comprises an external thread to be affixed to the respective discharge part, defined in any one of the gas outlet ~~(13)~~ and the gas

outlet tube ~~(1a)~~.

12~~13~~- The refrigeration compressor~~arrangement~~, according to any one of claims 1 to 11~~2~~, ~~characterized in that~~ wherein the retaining ring ~~(40)~~ incorporates, externally, a stop element (B) defined by a circumferential shoulder ~~(41)~~, for allowing that a tool for insertion of the retaining ring ~~(40)~~ be seated on the portion of the tube ~~(20)~~ surrounding the engaging portion ~~(32)~~ of the connecting element ~~(30)~~.